

<110> Victor Roschke

<120> 29 Human Cancer Associated Proteins

<130> PA004P1

<150> unassigned

<151> 2001-12-21

<150> PCT/US00/23794

<151> 2000-08-30

<150> 60/152,296

<151> 1999-09-03

<150> 60/158,003

<151> 1999-10-06

<160> 138

<170> PatentIn Ver. 2.0

<210> 1

<211> 733

<212> DNA

<213> Homo sapiens

<400> 1

gggatccgga	gcccaaatct	tctgacaaaa	ctcacacatg	cccaccgtgc	ccagcacctg	60
aattcgaggg	tgcaccgtca	gtcttcctct	tccccccaaa	acccaaggac	accctcatga	120
tctccggac	tccgtgggtc	acatgcgtgg	tgttggacgt	aagccacgaa	gaccctgagg	180
tcaaggtaa	ctggtagctg	gacggcgtgg	agtgcataa	tgccaagaca	aagccgcggg	240
aggagcagta	caacagcagc	taccgtgtgg	ttagcgtcct	caccgtcctg	caccaggact	300
ggctaatgg	caaggagttac	aagtgcagg	tctccaacaa	agccctccca	accccccattcg	360
agaaaaccat	ctccaaagcc	aaaggcagc	cccgagaacc	acagggtgtac	accctgcccc	420
catccggga	tgagctgacc	aagaaccagg	tcagcctgac	ctgcctggc	aaaggcttct	480
atccaagcga	catcgccgtg	gagtggaga	gcaatgggca	gccggagaac	aactacaaga	540
ccacgcctcc	cgtgctggac	tccgacggct	ccttcttcct	ctacagcaag	ctcaccgtgg	600
acaagagcag	gtggcagcag	gggaacgtct	tctcatgctc	cgtgatgtac	gaggctctgc	660
acaaccacta	cacgcagaag	agcctctccc	tgtctccggg	taaatgagtg	cgacggccgc	720
gactctagag	gat					733

<210> 2

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> Site

<222> (3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2

Trp	Ser	Xaa	Trp	Ser	
1				5	

<210> 3

<211> 86

<212> DNA

<213> Artificial Sequence

<220>

<221> Primer_Bind

<223> Synthetic sequence with 4 tandem copies of the GAS binding site found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)), 18 nucleotides complementary to the SV40 early promoter,

and a Xho I restriction site.

```

<400> 3
gcgcctcgag atttccccga aatctagatt tcccccggaaat gattttcccg aaatgattc      60
cccggaaatat ctgccatctc aattag                                86

<210> 4
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic sequence complementary to the SV40 promoter; includes a
      Hind III restriction site.

<400> 4
gcggcaagct ttttgcggaaag ccttaggc                                27

<210> 5
<211> 271
<212> DNA
<213> Artificial Sequence

<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes GAS
      binding sites found in the IRF1 promoter (Rothman et al., Immunity
      1:457-468 (1994)).

<400> 5
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tcccccggaaat gattttcccg      60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc      120
gcccctaact ccgcccaggatt ccggccattc tccggcccat ggctgactaa ttttttttat      180
ttatgcagag gccgaggccg cctcgccctc tgagctattc cagaagtagt gaggaggctt      240
ttttggaggc cttaggctttt gcaaaaaagct t                                271

<210> 6
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
      sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
      Xho I restriction site.

<400> 6
gcgctcgagg gatgacagcgt atagaacccc gg                                32

<210> 7
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
      sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
      Hind III restriction site.

<400> 7
gcgaagcttc gcgactcccc ggatccgcct c                                31

<210> 8

```

```

<211> 12
<212> DNA
<213> Homo sapiens

<400> 8
ggggacttcc cc

<210> 9
<211> 73
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer with 4 tandem copies of the NF-KB binding site
(GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the
SV40 early promoter sequence, and a XhoI restriction site.

<400> 9
gcggcctcg ggggacttcc ccggggactt tccggggact ttccggact ttccatcctg
ccatctcaat tag 60
73

<210> 10
<211> 256
<212> DNA
<213> Artificial Sequence

<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes NF-KB
binding sites.

<400> 10
ctcgaggggg cttcccgaa gactttccgg ggactttccgg ggactttcca tctgccatct 60
caattagtca gcaaccatacg tcccgccctt aactccgccc atcccgcccc taactccgccc 120
cagttccgccc cattctccgc cccatggctg actaattttt tttatttatg cagaggccgaa 180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggctttttt gaggcctagg 240
cttttgcaaa aagttt 256

<210> 11
<211> 1388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1388)..(1388)
<223> n equals a,t,g, or c

<400> 11
cgggtcgacc cacgcgtccg gtcccttagga gataagagta tcttgcacag caggtgcagg 60
tttcccgacg gctcaggca gagtccgatg tttgtgccat ctgatcctga tgtctggaga 120
gatagccatg tttgtggctgt aattttggcaaa tgacaaggccc agggagccgaa gcgtgggtgg 180
caggtggcga gtgtcctgggt acgaacgggtt tgtgcagcca tgtctggctg aactgctggg 240
ctctgtctc ttcatcttca tcgggtgcct gtccgtcatt gagaatggga cggacactgg 300
gctgtgcag cccggccctgg cccacgggtt ggctttgggg ctcgtgattt ccacgctggg 360
gaatatcgt ggtggacact tcaaccctgc ggtgtccctg gcagccatgc tgatcgagg 420
cctcaacctg gtatgtctcc tccccgtactg ggtctcacag ctgctcgggg ggatgctcg 480
ggctgccttg gccaaggcgg tgagtccctga ggagaggttc tggaatgcat ctggggcggc 540
ctttgtgaca gtccaggagc agggggcagggt ggcaggggcg ttgggtggcag agatcatct 600
gacgacgctg ctggccctgg ctgtatgcat ggggtccatc aatgagaaga caaaggccc 660
tctggccctgg ttccatcgt gctttggctg caccgtggat atccctggctg gggggccctgt 720
gtctggaggc tgcatgaatc cccggccgtgc ttttggaccc gcggtggctt ccaaccactg 780
gaactttccac tgatctact ggctggccc actcttgcgtt ggcctgtt gttggactgt 840
cattaggtgc ttcatggag atggaaagac cccgcctcatc ctgaaggctc agtgaaggcag 900
agctcgtggg attccctgtc ctccagggtgt cctcagctca cctgtcccag actgaggaca 960

```

ggggagttcc	tgcatttcc	gccagggcag	aggcccagag	gagcgacccc	ctgcttccac	1020
tgcttggcc	tgcttctca	gatagactga	ctgctgagga	ggctctaggt	tcttggatt	1080
cctttgtct	catcagagac	cccagcctgg	ggaacacgcgt	gcccgactg	cccgagagc	1140
agtgc当地	ccacaacacg	agcgtttc	tttagagggaa	tgccccgg	ttggacaagg	1200
aggctgtttc	tgcacatcg	ctcatttccc	gcacccatt	tcttkcttg	ttgcttgtt	1260
gggggctgg	ccacttcctt	gcttctcaag	ctgacaattc	tgcaclttgc	aataaatagt	1320
ccagtgtttc	cttccaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1380
	aaaaaaaaan					1388
<210> 12						
<211> 1478						
<212> DNA						
<213> Homo sapiens						
<400> 12						
ccacgcgtcc	ggaagtaatg	atgacaaaat	actctaacct	ttccttggag	agtctataact	60
tctcgctgac	tgcttcaccc	cttacaagtc	tgcccatccc	ggaagtaatg	atgacaaaat	120
actccaaacct	tttcttggaa	agtcataaca	tctcaactgac	tgaacattcc	agtgtgtccag	180
tggaaaaaaa	tatcacttta	gaacgaccc	ctgctgttaga	actcacatgt	cagttcacaa	240
cttctgggaa	tgtgaatttca	gtaaatgtga	cttggaaaaaa	agggatgaa	caacttaaga	300
attaccatgt	cagtggccca	gaaggccatcc	tgtataccca	gtacaagttt	tccatcatta	360
atagc当地	acttggaaagc	tattttgtt	tcttttgaaga	ggaaaaggaa	cgaaggggca	420
catttaattt	cggatccctt	gaagttcaga	gaaaaaaacaa	accattgtac	actttatgtgg	480
gggattccgt	tgtcttgggt	tgtaaatgcc	gacactgtgc	tcctttaat	tggacctgg	540
acagtgttaa	taggagtgtt	caggccctc	ttgatgttca	catgaatgaa	aagtatgcga	600
tcaatggaaac	aaacgc当地	gaaacaaggc	ttaagataat	gcagcttca	gaagacgata	660
aaggatctt	tttggccat	gcaatgttcc	agttgggcga	gagccaaagaa	agtgttgaac	720
tggttgtat	aagtttattt	gtgcccctca	aaccatttct	tggaaatagtt	gttgaagttt	780
tttcttttagt	ggcttattt	ctgtttgtt	aatgc当地	ccaaaagaaa	aagatgcaca	840
tggatgttgg	gaaagaattt	gaacaagttt	aacagtttga	atcagacgt	agcaacggca	900
tagaaaataa	tggcccccagg	cacagaaaaaa	atgaagttat	gagccactgt	aagcaaaaaca	960
tcgtgtcaag	agtaatggaa	agatgtttag	tttctacttc	agctttgtt	atgtttccct	1020
tgaagaacat	ctgagttttt	attttttacaa	ggatgaaaag	ttttagtgt	atgctcagca	1080
gtagtttgc	aataataacct	gctatctcg	atccaaagat	atattttct	tctgtgatta	1140
ttttacatta	aagcaaggtt	aatcatatta	aatatgttct	atgagctata	acccaggata	1200
actaatttca	tcttggtcat	caaggccatc	acagaagaga	taccagccaa	accagttgt	1260
agtacatgaa	ctaatgtcat	tcaagaccc	cgtataacca	aagaatttcat	taaagagaaa	1320
acttttttgc	catttgcctt	ggttttttt	ctaatatgc	ttactatgtt	tagaaatatt	1380
tgttaataatt	ttcatgttatt	ggtcaccctc	tgtcatattt	gataaaaaca	tctttattaa	1440
gaaatgaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa			1478
<210> 13						
<211> 1684						
<212> DNA						
<213> Homo sapiens						
<220>						
<221> misc_feature						
<222> (1)..(1)						
<223> n equals a,t,g, or c						
<220>						
<221> misc_feature						
<222> (18)..(18)						
<223> n equals a,t,g, or c						
<220>						
<221> misc_feature						
<222> (63)..(63)						
<223> n equals a,t,g, or c						
<400> 13						
ncggcgac	ccccccant	ttaatgacgc	ctgcccgtcc	gtccgaaatt	cccggtcga	60
ccncgcgtcc	ggcgggaccc	gtttgcggga	agattctgt	gacaatcacc	atgggaagca	120
aaggaggctt	catttctctg	ctcatctcg	ctgtgtctg	ccgttcagg	catagccctga	180
catgtacgc	ctgtatttgc	ctgtaaacct	gcaacaagac	cactgtttgt	tcaatgttatt	240

atgacgcgtg	tctgttggtc	aaagctgatc	caaaactttt	ttaccgccag	tgttggaaagt	300
ttgatgactg	cagctacctc	tctatctcca	aagccctggg	gctgaagaag	ctccagtaca	360
gctgttgcctt	gaaggacactg	tgcaacggga	gtgccagggt	ctctggatg	acagcgttga	420
tgctgtcccc	cttgctggcg	gcagccttga	cgctttgtct	ctaaatcaac	accgggaggc	480
cttctctaa	actttccgtg	tctccgtata	ctcccttattt	ccttggctgc	tgcatgccc	540
cagctttattt	tcacctgtcc	cgttgggcaa	gactaacaact	agtttgggca	acttggtgcac	600
aagagaggct	ctgagagagac	ttgaagggtca	gtcctgtggg	cagcgaagac	ccgtcgagg	660
gacatggtat	aaaagggtgc	agcacgtcgc	atctgagctc	ggccgcacgt	ttttcctcg	720
gcttttcaca	agagcagcct	cgccaggaca	gcttgshtac	ctcagatctt	ctgcaggggc	780
cggtcatgg	tattttccct	ctgatggctt	ggaggtgatt	tttaaatact	ctgatctgga	840
ggggaggggcg	gtggtaactgg	gacaggggggt	tcttttcgac	agcctctccc	agggaatgct	900
ttcatctctt	ccctttatgg	caccgcgcgt	gccaaggcagg	ccgcaccacg	ctcccacatg	960
cgggctgttg	gggagcggcc	gggagattct	cagtgttggg	tgatcgact	gacccttgc	1020
gtctcaactc	gggggtgcct	ggcagggaag	gagggggagct	ttccacacgg	caggggccttg	1080
aactccagg	tctgttctcc	gaaaaggtagc	agtggtctaa	atcagatttt	tccctatca	1140
ctcggttgc	aatgggctt	gcttgcgtc	atagagaaaa	cttagcatct	aataatgtatg	1200
tgtgaaaatt	attccttcaa	cttttgcattc	agattgggtgg	ggtatcttgg	cttgcata	1260
cgcaaggtaaa	gtctkaacgt	tgggacactc	tgttaaaaat	aactcgatgt	ggggcacctg	1320
ggtggtcag	tgggtaaaag	cctctacattt	gggatcatga	cctgaggtga	aggcagaggc	1380
ctagcccaact	gagccaccca	ggcgccttca	aaagtgttac	accttttgag	gaagagttt	1440
gccttttct	tggggctgtt	cctgaataat	ttgcaagatc	cagcagtccg	aaggacactt	1500
gttttcttwat	catctcggtc	gtctctaaca	gcacagcttgc	gcttttgc	gatgaagggt	1560
ggacttcagg	attaacattt	tttttctactc	ccttgcctcat	gtaatctatg	taacaggctg	1620
gaatgactga	tgcctttctg	aaaataaaaat	gtaatcaagt	gcaaaaaaaaaa	aaaaaaaaaa	1680
aaaa						1684

<210> 14

<211> 1173

<212> DNA

<213> Homo sapiens

<400> 14

ccacgcgtcc	gaaaatcatc	aactaagaag	ggcccatcag	tatagagaac	gttagcctgt	60
ggagctgtga	atgtgatgg	gacaagattt	atgtatagc	tctgctacct	gcctgggttt	120
cctttgagtt	tctttatcc	tagatttgc	agctgagaaa	tcttaggtgg	ttcatattcg	180
taatcattga	ttaacatgca	catttgggtt	tgcacatttt	tgtttatcat	acattttct	240
ccgttttcta	ttaaagaaca	tgctctaggg	gaactattaa	tagccacca	gtcgggtagg	300
cagcatcaa	tcttctatg	ccttcttgc	ccacctgttg	aggtcttct	tctgaaacaa	360
agaagaaaata	gacaaatcag	acttgcctc	ttggaaatgt	ggtccagat	tctctactcc	420
caagctccaa	aaaaggcata	cattggatgg	gttagatcaa	ctcctctgt	gagccataaa	480
tccgccaaga	gttggtttcc	atgtgggtt	gtggtacaat	ggggaaacgc	tgatgttgg	540
ggaaaggcagg	aggactttag	agtggatgttgc	cattctaattc	tctctggcgc	ttcaactatgt	600
tgacctgggg	caaataatgtat	aaactctatg	agcccttttc	cttatacttta	aatgaagag	660
aagtaataacc	taccttgcgt	ggctgttgc	aggattaaat	gaagtaatgc	atacagtgc	720
taacaaagta	ttaacatca	tatttttaa	aagctcatga	aatattatgtt	tttcttcctt	780
ccctctttc	tattttctct	cctgttccct	tttctctccc	tcctctgccc	tcccttcct	840
tcagatgtt	gtctaaaaca	gcaccttgg	tctaaggcgc	acctttgaga	aagaaaagac	900
tgcttcaaga	atgtctatgtt	gcaccccttgc	tccgtatgttgc	gcctaaatgc	ctaggttgg	960
tcaatagttt	atttttttta	ttgaaactgtt	taatatttgc	tatggactta	cattcacttt	1020
tactgttttc	tgtatattta	cttttgcgttgc	aatgttttta	atattgacta	tttacctctg	1080
ctcattttta	ttgattttct	gtatttttc	aatgaaaatt	ataataaaaa	ttatttttgt	1140
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaa			1173

<210> 15

<211> 1013

<212> DNA

<213> Homo sapiens

<400> 15

ggtagacatcc	cagtgccttgc	cgtgcaggca	aggcacaccc	gaagcgtgcc	atcctggggc	60
aggaggaggc	gtcgccgtc	cacgcctgt	gcccgcgtcc	gcgcgagggt	gacctgtttc	120
gggctgtat	ctcccaagac	ctgcagcgt	cactggccaa	gtatgcggag	ctcgaccgt	180
aggatgactt	ctgtgaggct	gccgaggccc	cggacatcca	gcctaagacc	caccagaagc	240
cagaggccag	gtgccacgc	ctgtcccagg	ggaaggggcc	tgacatcttgc	catcggtgg	300
ggccctgtc	tgtgttctca	gccaagaacc	gttggccggct	ggtggggccc	gtccacactg	360
cccgaggaga	gggcggctt	ggcctcacgc	ttcggggaga	ctcgccgtc	ctcatcgctg	420

ccgtcattcc	agggagccag	gccgcggcgg	ctggcctgaa	ggagggcgcac	tacattgtgt	480
cagtgaatgg	gcagccatgc	aggtggtgg	gacacgcgg	ggtggtgac	gagctgaagg	540
ctgcgggaga	ggcgccgcgc	agcctgcagg	tgggtgcgt	gctgcccagc	tctagactgc	600
ccagcttggg	ggaccgcgg	cccgctctgc	tgggccccag	ggggctctca	aggagccaga	660
gggagccatgg	ttgcaagacc	ccggcatcca	cgtggccag	tccccgggcc	ctcctcaact	720
ggagccgaaa	ggcccagcag	ggcaagactg	gaggctgccc	cagccctgtg	ccccagtgaa	780
gccagctccg	ccctcatacct	tgaagcaccc	agggtgcccg	tgaggggccag	gatccctgca	840
cgcctcagcg	ctggctccag	ctggcagcaa	gcaccgagca	tgcctcccc	accagagga	900
cctccggca	atgcctgtcc	cgcctcatgc	tggaggctgc	ctcgccgacc	tgcctgcccc	960
ttaaagactg	gtcagacctg	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaa	1013
<210>	16					
<211>	1616					
<212>	DNA					
<213>	Homo sapiens					
<400>	16					
ggcacgaggg	aacattctgg	taattttag	agatctgttg	gcatctctgc	ttcacaaact	60
ggaaaaaaatc	attttaagt	cttgctaatt	acttttcttg	gagaagaaaa	aaaatgctac	120
agttgcaaac	aatatgtatag	ttttcaaaaa	gaagcaactt	ttttgtctcc	cagtttattc	180
ttagtttcca	gcccacgcct	tgcgatagcg	ataggcatag	tgatggcctc	aattctttct	240
ctcttgcatc	ctgacccctt	gctgtgtac	tttgcatggc	ctctcattaa	agaggcagag	300
ccccctctcc	caccatccatgg	agcagggttt	gagagtaaca	gaatgaagt	aaaatgacac	360
tgtggcagtt	ctaagaccag	ccctcaaaagg	ttcatgtgtt	tctgcttgct	ttcactgtat	420
ttgaaatgtt	gctgtgagaa	agacatctct	gaaacagctg	aatggctct	agaaaaaggat	480
gagagatgca	gggagcagag	ctcccaactg	aggccagcc	agatcaccta	agagccaggc	540
ccccagttt	ctctcatgtg	taagcaataa	atgcttaccc	cagcaatacc	accaagggtt	600
gtgggtgggt	tatatacagc	attaatgtgg	caataggtgc	aatacaccc	gttaaaca	660
ccatacacat	atgactctaa	ccctaatacat	aaattgattc	agtctgttca	gttccacaac	720
gctgtttct	ccagaatctc	acagatgact	tactaaatcc	aacacaaata	cacccatagac	780
tttctgtcta	gctcccaacc	agttaaaagg	atttctaaat	atttttttt	ttagtcgtag	840
tgcaaaaagg	tatttctctcc	ctttctctat	agttttct	catttttct	tcagacctag	900
aagcatgaga	gcccagctgt	caaagtcatc	tagacccct	tcagaagg	attaaatttg	960
tctatttcac	aggattgcaa	gataaaatac	agaatgccc	gttgaattt	aacttcggat	1020
aaacaacaaa	tttttttta	gtataagcat	atcccataca	atatttgg	tatacttata	1080
tttttatatt	gtttatctga	cgttcaagct	aactgggcat	cctgtat	tcttagctaa	1140
atctggcaac	tgtgtctattt	cattggaaac	ctgaaagtgt	acaaagaagg	aagaagcaga	1200
atctggccata	ttagatata	aaatggcag	gcccaggact	ccctaagtca	agaaaccaag	1260
aggcgtcatt	acggaaaaga	gtaaatcacc	ctgtgtctc	cttggtagt	ctccctcagc	1320
gatggccca	tgttatgaat	ggggaaaagg	tcactgaa	gttcatgt	aagaaacttt	1380
ttggatgatt	tctgttggt	gttttggat	accttcaagg	gatcagaaaa	taatataactt	1440
aggaaatttt	gtaatgtca	tcattactct	ctacattatt	attatgacgg	ttacaattgt	1500
taaatctagg	tggtggtat	gtgggtata	ttgtacatga	tttttaactt	gtctgcattt	1560
ttgaaattat	aataaagtca	ataaaataat	tattgagaca	caaaaaaaaaa	aaaaaa	1616
<210>	17					
<211>	963					
<212>	DNA					
<213>	Homo sapiens					
<400>	17					
ggcacgagcc	gagttgaccc	cacggctctga	gatgtccaaag	ctgcccacag	acagcagtgt	60
cccgagaca	ggcgcggcga	atgggtacag	agacgtcccg	caggcggaga	ataacaagagc	120
ttgaagaac	ccgcaggcga	ttcgtggaaag	cctgcagagc	aagggaagca	gcgtttgtat	180
ccgaatatac	gcgaaatctc	cacagggtgg	acctcgat	ttaaacctt	acatagactc	240
tgactgcctc	tgaagttatc	aaccctctga	tagaagaact	tggttgcgt	aagtttatca	300
atagagaata	gttatgtgg	gacactactt	caagagaacc	tctgcattcc	agtcatacc	360
atcctgcaac	ttgat	gaagtcaaga	gtatatcg	ataagacagt	gcacagggtgg	420
agggaaaaaa	aagggggagg	gggaagctt	tcttgaaaaa	gcatcacaga	atagaaaaaa	480
aatgtcgaaa	gcattataac	tgttaacgtt	tttgatgtt	tgattgtatcc	acatttttcc	540
ccctgcattt	tggaaaatgt	ctctcagat	tgcttattt	caaagttaa	gatggtttt	600
taaaatttgg	actgtgaaa	catcaatact	agagccat	aggatgaa	aaatttatca	660
atagtgcgt	acagaataag	atgttaacgc	tgagttat	ggactgaa	gctatgaaaa	720
gaacttgaaa	ttgtcgaaat	atgtgtctc	ttcatgtcat	attcaataga	agtttcttagt	780
ttaagattga	ttttgtgttt	tcttaggc	ttcaagtgc	aagcaaagta	aatgtatata	840
ttatgtgata	aatcatgttt	tcaagaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	900

aaaaaaaaaaa	aaaaaaaaaaa	aaaaaaaaaaa	aaaaaaaaaaa	aaaaaaaaaaa	aaaaaaaaaaa	aaaaaaaaaaa	960
aaa							963
<210> 18							
<211> 1369							
<212> DNA							
<213> Homo sapiens							
<400> 18							
ccacgcgtcc	gggaagttgg	cccgccggct	gctgggcttg	gctgctggc	ggaggtggtg		60
ggctagcttgc	ggtcccttgg	aggcctcagc	aggcctca	taactacctg	ggtgggctgc		120
ctgaggagag	aagtgaagtg	tggaaactt	ggggaccctg	taggagcgct	atgaaggttc		180
agaaggtgt	gggtctccccc	ttgcttgaag	tgcagtgccc	agttcttgag	ccccccaata		240
agcctcagaa	ccacccatcat	tagttttga	ccccccttac	caaggattgt	ggcagaaaagg		300
aagatgttac	caagtatttc	agtgaattcc	ccaatgcagg	ggaacggatg	ttgaactcca		360
gggatgcaggc	aagacacaca	gcccggcata	acgctacaaa	tacctgagaa	gacttttgc		420
ttttccggcag	atggacttttgc	atggactttc	atggcagatg	ctctacccat	ttacttcccc		480
acagagagtt	tacagaaaatt	ttcattatcg	aaagcagaca	aaggatcaat	gggcccagaga		540
tgaccctgct	ttcttggtcc	tgttaagtat	ttggctctgt	gtgtccacta	taggatttgg		600
ctttgtcctg	gacatggat	tttttggagac	gataaaagctg	ctccttggg	ttgtcttcat		660
agattgtgt	ggcgttggtc	ttctcatatc	aacttaatg	tggtttatct	cgaacaagta		720
cttagtgaag	cgccaaagca	gggactatga	tgtggagtgg	ggttatgcct	tcgacgtgca		780
tctgaatgtc	ttttatccctc	tcttagtcat	tctgcatttt	atccagctct	tcttcattaa		840
ccatgttac	ctgacggaca	cattttatgg	atattttgtt	gaaaatactt	tgtggctgg		900
ggcagtggc	tattatatct	atgtaacctt	ttaggatac	agtgcattgc	cattttgaa		960
aaatacagta	atttttcttt	atccatttgc	gcctctcatt	ctgctctacg	gcctgtccct		1020
ggcacttagga	ttgaacttca	cccacacact	gtgctccttc	tacaagtaca	gagtaaaatg		1080
aaggcgcctgg	gagactatgc	catcttacct	gtgccacagg	cagagatgt	gaggggatga		1140
tttcttccga	aacttgcata	taaactgtct	ttttagatat	cttcagatgt	taaagtttgc		1200
aaatttgagt	aagtataata	tgttaacgta	tttcaatac	attcccttaaa	actactaaaa		1260
ggtacatttc	tataataat	atttttaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa		1320
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa		1369
<210> 19							
<211> 1298							
<212> DNA							
<213> Homo sapiens							
<400> 19							
atgaaccctc	tttccctgaa	ggtgggattt	caggaagacc	ccaccacccc	gtttcacctt		60
agtccaggga	catagttccc	aagtggggcc	cgccggccct	aggcctctg	gaaagggtcc		120
cggggggca	cttgggtgg	gggtggcact	tggcggggcc	ccagccctga	cagctggcct		180
gccacagaat	gacacagacc	tgtacagcga	ctgtctccga	accttctgga	cctgccccca		240
ctgtggcctg	catgcgcccc	tcacccctt	ggagcgcattc	gcccatgaga	acacctgccc		300
ccagggccca	caggatggcc	ccccaggtaa	gcacaggact	gtggggaccc	ggccacccct		360
ccccaggccgt	ctgccccatcc	catgtggtc	tctctgtcgt	gtgagactt	gttagagctt		420
cgaggactga	cgaccctccac	ccgtggcccc	tggctgggtc	cacacacagg	ccttgccttg		480
aagatcagga	gccccaaaggca	gggagggctt	ggagcgcacc	ctctttctgt	ctgcctgtcc		540
cctgtgggt	ctctgtgttgc	ctgttttgc	ctctgttttgc	gtctctctgt	ggctatgtct		600
cttggatttt	ttctctgtcc	tgcaagtatc	tctgccttgc	tcacccctac	cctgttgta		660
cccaggatg	ccacacactg	gggttcagtg	ggggagatag	cactggggcc	acatgcctcc		720
atccccggct	ggctgtgtc	gcctgtcagt	ctccatgtct	ctccttgcgt	cttctctct		780
gtctctctca	ctggcagggg	tgcggagtaa	agacagaccc	gtgtattttt	attaatctgg		840
gagggtttcc	ttggaggagg	aaaactgggt	tctccaaagg	ccaggagaga	acttgagccc		900
cacaggtgc	ttgcattttgg	gtgcgggtag	acctgtgcac	tggAACACGC	cccttcacagc		960
ctcctccctt	tcctccctta	ggggctgagg	aaactgcacc	cgaaacccctc	cagaagacat		1020
ctgtctctca	gaggccctac	cactgcgagg	cctgcgggaa	ggacttcctc	tttacacccca		1080
cagaggtgt	gcccacccgg	aaggcgcacg	tgtgagctgg	gccaggagcc	ctgcccaccc		1140
ccgtgcagct	gacctgcctt	ccagccagg	actaggggca	ggactcttgc	ctgaacccccc		1200
agcctggct	tagccctgt	gtccgttccc	atgtcagagg	gcctggagca	cgattgtga		1260
ataaagccgc	acatgtgtat	aaaaaaaaaa	aaaaaaaaaa				1298
<210> 20							
<211> 1967							
<212> DNA							
<213> Homo sapiens							

400 > 20	accaccatc	cccccaccac	tgccaccacc	cgccgcacga	ccaccaggcg	tccaacaacc	60
	acagtccgaa	ccactacgcg	gacaaccacc	accaccacm	mcaaaccac	cactccatc	120
	cccacctgtc	ccccctggac	cttggaaacgg	cacgacgatg	atggcaact	gataatgagc	180
	tccaaatggta	tcccagatg	ctacgctgaa	gaagatgagt	tctcagggt	ggagatgac	240
	actgcagatc	ctacggaaga	ggcctacgtt	atatatgtat	aaaggatatga	atttgagacg	300
	tcaaggccac	caaccaccac	tgagccctcg	accactgtca	ccacaccgag	gtgtatccca	360
	gaggaaggcg	ccatcagttc	ctttctgtaa	gaagaatttg	atctggctgg	aaggaaacga	420
	tttggtgctc	cttacgtgac	gtacctaaat	aaagaccat	cagccccgtg	ctctctgact	480
	gatgcactgg	atcaattcca	agtggacacg	ctggatgaaa	tcatcccaa	tgacctgaag	540
	aagagtgatc	tgcctcccca	gcatgctccc	cgcaacatca	ccgtgggtggc	cgtgaaaggt	600
	tgccactcat	ttgtcattgt	ggactgggac	aaaggccaccc	caggagatgt	gtcacaggt	660
	tactgggtt	acatgtcata	ctatgaagac	ttcatcagga	acaagtggtc	cactcaagct	720
	tcatcagtaa	ctcaattgcc	cattgagaac	ctaaagccgg	acaaggatgt	ttattnaaaa	780
	gtgcaaggac	aaaatcctca	tggtcatacg	cttacatcgcc	cttcgggttc	atttgcacc	840
	gaatcagata	atccctctgt	tgttgtgagg	ccccccaggcg	gtgagcctat	ctggatccca	900
	ttcgcttca	aacatgatcc	cagctacacg	gactgcccatt	gacggcaata	tgtgaagcgc	960
	acgtggtata	gaaagtgcgt	ggggagttgtt	ctttgttaatt	cactgaggta	taaaatctac	1020
	ctcagtgaca	acctgaaaga	tacattctac	agcattggag	acagctgggg	aagaggtgaa	1080
	gaccattgcc	aatttgtgga	ttcacacctt	gatgaaagaa	cagggcctca	gtccatgt	1140
	gaagccctcc	ctactattca	aggctactat	cgccactata	gtcaggagcc	tgtcagggtt	1200
	ggaaacatcg	gcttcggaaac	ccccctactat	tatgtgggt	gttacgagtg	tgggtctcc	1260
	atccctgtaa	agtgttaatc	acaggaccgt	catgtgcaat	gcttgcctcc	cccaaaaaaaa	1320
	ccaactaagt	cgcaactaggg	gctgtgagca	aagacagccca	gcgtgctcag	ccccgcgtcc	1380
	ctaggtgcca	ggaaggtcay	agatggacac	tggcattct	ggtcatactca	gtctggaaact	1440
	cagtcccaact	tcttggccctg	gacaatgaac	aggattcagt	tttgcgttta	actttgcattc	1500
	tctactttt	tttggttgtt	tgtaatagca	catcccagag	acatcagaaaa	ccagcaactg	1560
	attcagtgt	atttccagac	tttttaggca	tgaatttcgg	acacttcagt	atttccagga	1620
	atagcatatg	cacgtgttc	ttgcttcatg	gaatgtcaca	tgccttctgt	ttttctcatt	1680
	ttggatttct	ccaaaactaa	ctgaattttaa	gcttcagggt	cctttgtatg	cagtggaaag	1740
	gaatttataa	aaacaccac	aaagaaaaaa	aatatatct	acttggaaaat	tactctatgg	1800
	acttaccac	tgctagaata	aatgtatcaa	atcttatttg	taaattctca	attttgatat	1860
	atataatgtat	atatgcata	acatatccac	acttgcgtc	aagaatattg	attaaaattg	1920
	ctaaatttgt	acttggtcac	aaaaaaaaaa	aaaaaaaaac	tcgtgc		1967

<210> 21
<211> 850
<212> DNA
<213> *Homo sapiens*

<400> 21	ggcacgagct	ttgaccatt	caaggatgtc	tctgcctgga	gaactagatc	ctgactca	60
ggcagcatag	gttccccc	agggtggtc	tgaacttcag	ctcagaagca	gcctggaccc		120
catcttac	ccagataagg	tgttttaggt	actctgtgc	cagtgttagt	gcaacttagt		180
ttaaaaatag	aggacttgtt	cacagatgc	tctaagtctc	acactggat	tttgcacac		240
ataaaagttag	tgatTTTgga	gcagagcga	gtctagaaaat	ttgcctaaa	ttatTTgtgg		300
tactcttagag	aacgtggat	gtgtatgtgt	gtatgtgt	ttgaatata	gaactagttc		360
attgaacgtt	agattgttct	aagaccagaa	ttagattaaa	aatgcataac	atattaagta		420
ttaaaaatgt	tttatattgt	atatgaattt	tttgcggtaa	gtttagctt	gcattttagg		480
ttttaatgta	tgcttaatct	gttaaaaatga	tgtactgtat	tttaaaatgtat	tctaattgt		540
ctttttgtt	ccatcttcag	tatgaaaaat	gtcagtattt	agttccctt	tcaggcacaa		600
ttagatttt	attgacattt	ttttccccc	taactcatgt	aattgtcat	agcaaccaag		660
agtcaagaga	gtgattacca	gccaattaag	aaaaatgtga	ccaaggat	tgcagagtac		720
aataaaaaacca	tcgtggatgc	tttacatagc	atcagcggaa	actgagttt	agtccactga		780
aagtctctaa	ggaagtatcc	tcttgctgt	aaacttggta	caagttgact	accaaaaaaaaa		840
aaaaaaaaaaa							850

<210> 22
<211> 1205
<212> DNA
<213> *Homo sapiens*

<400> 22
ccacgcgtcc gggttttct tccatctgac atctgccagc ctctctgaat ggaagttgt
aatgtttqca acgaatccag ctcacttqct aaataagaat ctatqacatt aaatgttagta

<210> 23

<211> 1167

<212> DNA

<213> Homo sapiens

<400> 23

ccacgcgtcc	ggaagaaggc	ctaatccct	acctgggacc	cagagagaga	cataagat	60
ccagagagat	atgcaccaag	aaactgcaat	ttatacaaag	acagtcgaaa	gcagactgaa	120
gacagaatga	gagagaaaact	aagtaaaaaga	aacttggatgc	ctccaaaatg	aagagtatgc	180
ctcatttcca	tatgtgaact	gaaaagctct	ccacttggta	aataaaaggct	tactatagag	240
cagcccttgt	aatagaacta	caagacttat	aataacttcc	tgtttggatt	gaaaatgaaaa	300
ctcataaaga	atctatgcta	ttaacccccc	aatttatact	tttgatttct	tttatgttgt	360
attttgtatt	ttatgttgg	cttctttttt	aaaattttg	atttattttt	aattgaaaaa	420
taatttgta	tacttattgt	tgtacaacat	gatgttttg	tatatgtata	tgttgttagaa	480
tgactaaatc	aagcttagtt	acatatgcat	taccccttat	acttattcatt	tatttgtggt	540
gagaacattt	aaaatctact	ctgttagcaa	tttgaagta	tagaatacac	tatgtcaact	600
ataatcatgg	tgttgtacag	taggtctaaa	tgtattcatt	tctccatct	aactgaaaat	660
ttgtatcttt	tgaccaacat	ctccctggtc	cctccatctc	ctccctgtt	aactaccatt	720
attttttttt	ctttttttta	aaaaaaagct	tttagtttcg	agggtacacg	tgtaggttg	780
ttatataat	aaacacaagt	catgggactg	tgttgtacag	attattttg	cgtccacgtt	840
ctaaggcttag	tgccccatag	ttattttttc	tgccttctc	cctccctcta	ccctctgcct	900
tcaagttggc	ctaatgtcta	ttgtttccctt	cttggtaaca	accacttaa	tctctgtctc	960
taagggttcc	tatgtctgac	ttctttccct	tgattttgg	agattcatcc	acgttggta	1020
tgcagcagta	gttattttat	tttcatttatt	ggatagttt	cctttgtgt	acacataaaatt	1080
gctgtatggca	gatgtttgaa	ttgtttccag	tttttgagta	ttatgaataa	tgctgttgt	1140
aacaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa				1167

<210> 24

<211> 929

<212> DNA

<213> Homo sapiens

<400> 24

gagaagggtgg	ttatttatac	aaacatggac	atactcact	ccaagggtcg	atgagatgt	600
gaatttctt	tggggcatt	cattaatttgc	cccagctgca	ggcactggag	caagtctgga	1200
agctgcctgt	gctaagacca	cccagctgtc	cctgggttc	catccttaggg	ccttcatttgc	1800
ttccagggtca	ggggacctgc	ttcaatgaga	aagcaactga	attgagggtca	ggagaggttag	2400
ggagagctga	gttctgactt	cacctgtgca	gaactctctg	ccccatgtt	acctggactg	3000
gaacagactg	tgaatatacg	agaagggtcc	agaactctg	gtgtctgacc	tagaagaggc	3600
acagttctct	ctactggaaa	gaaaacatgt	tagccgatttgc	cacaagggtg	ccaagggaaag	4200
acccaggatg	gccccatcaaa	ggAACCTGGG	ggaggatgca	ggaggctgaa	gggatgcacc	4800
tggcatttct	ctcaactgtgc	tcttaccgca	ttagcaacccc	ccaaacttttgc	ggctactct	5400
gccccccatg	cgtaaatacc	ctgttggat	gtgtgtctt	tccgggttgc	ctctaaacccc	6000
ctttctccag	ggcatgttgg	tttcccttggc	cttcagttgt	cctaactggaa	gccccagagtg	6600
ccttgttctg	agccaggaga	cggctgagca	ctggccctcc	acacctaagc	gtcctttaca	7200
ttaacttatt	ggtcttgtat	aacacctgggt	gccattgcca	agtggctgtg	tcctcagcta	7800

cagagctgga	atttgtgtggg	gtttagtgc	aaatacttca	ataaaagtctg	ttttttgtga	840
ttggctgaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	900
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa				929
<210> 25						
<211> 397						
<212> DNA						
<213> Homo sapiens						
<400> 25						60
ggcacagaaa	ataataggaa	aagtactact	agatgggcct	gaaaatgcct	tggttctcta	120
acttgtgt	aatggccaa	atcattaaaga	caaggacatg	tgacagacta	atttgaaaaa	180
tttatttc	tggtactgc	ttttgttat	tctatgttac	aatctacacc	cataccaaaa	240
tgctgctt	ttttgttg	ttgttgggg	ttggatctgt	caccaggct		300
ggagtgcaca	cctgtatcc	cagctactcg	ggaggtgcac	gcaggagaat	tgcttgaacc	360
ttggagggtgg	agggtgcagt	gagccgagat	cgcgcattt	caatccagcc	tggacaacag	397
agtgagactc	catctcaaaa	aaaaaaaaaa	aaaaaaaaaa			
<210> 26						60
<211> 949						120
<212> DNA						180
<213> Homo sapiens						240
<400> 26						300
gaggccctct	cccatattct	ttctcactct	atccccacc	gaagagggct	cagaaaaaaag	360
tttttattaa	tatatttggg	gtcggagaaa	tacaaacatc	acaaagaata	cgatatcccc	420
agcttaaatg	tactggAACG	tttgcgtatg	agtttcattt	ccaaagtta	ccctacatag	480
ggaattgttag	aagtggat	gttagaagtga	gttcgtgtga	aaaccctggaa	agaaaaacaaa	540
agccccatgc	aacacgttcc	gggctgtgt	gtatgtgttt	attctatgtca	ctaggggaag	600
cacataaaaa	cacccgtgg	gtgtgtgt	aaggccgaat	tttgccttt	tggggagttc	660
atgatataaa	cacttagaaac	caaaaaagtca	aatcagaagg	tcagtttag	ctttagttct	720
ctttgagggaa	agatttaaag	caatagacta	taatgttac	ccggtagact	aaaaaaaaattt	780
gccttaatt	cttttggatt	gaattttttt	ttacaaagtt	tggagcatgg	aaacaaatga	840
aaatttgaacc	tgcttatttt	tttagatgtt	gtattgtatgg	ccccaaacaga	actttctaaa	900
atcatatgc	aaacatataat	gatagtagtt	gtaaaatgtct	tcttgggtt	aaaatgttga	960
gtaattatcg	atagaaattt	tgctgtccat	tcatacattc	cttcaattaa	ctttcattgt	
aaaaaaaaattt	ggggattgtat	gtttgggtt	gtttgtgggg	agtgaagagg	actactggag	
ggggcttgg	tgcttgcctt	ttttcttttt	ttaaatttac	atcaagtcta	ggaaggaggt	
aaagtgcga	caattgtcac	ttttccctcc	taagaaagta	acatgttaa	attcccacct	
accagcctgg	gtgacagtga	gactcccg	tcaaaaaaaaaa	aaaaaaaaaa		
<210> 27						60
<211> 1053						120
<212> DNA						180
<213> Homo sapiens						240
<400> 27						300
gcaaaaaggaa	aaattcaaaa	tttagaaaaaa	acattagaaa	tgttaatatg	ggatattttt	360
gacttaaagac	attcagaaaa	gttaatgttt	taacacgata	tgtgattata	gaattctatt	420
catatatgt	ttcacattt	tacacttgc	tatactttgt	atttataaat	ataattctgt	480
tagataaata	agtgattcat	atttgtcaa	aactattttt	aaatttcaat	atttaaaata	540
tttttgaatc	actgggtttc	gttaagtggc	atcatagatg	agatttgatt	ccatgttagca	600
tataatttt	gatgttcc	ctctcacccc	ttttaaactc	cttcaagcat	tgcttattact	660
ggggttggct	ttggggaaaac	ttacttctag	atactaccat	atatctggaa	tagtagaggt	720
ggatgttaat	aaaatttca	aaataatcat	gtattactt	ttttgttattt	ccacttggaa	780
gaaatacagt	catgtcaat	ataatgtacgt	tttggtcatt	gagacccaca	tgtgtgacag	840
ttggccatata	aggatgttgc	tgaaaaattt	ctgtgtctgc	ctagtgtacac	tgtgtccatc	900
gtaacgcacat	agcacgcac	gttactcacc	tgttcatgtt	gatgtctgg	taaacaaacc	960
tgtgtctggca	gtcatacaaa	agtatagcac	aatgacaatt	atgtacagt	tatcataatt	
tttgataata	aatgactatg	ttacagg	ttgtattgtat	tccactttt	gtcatttattt	
ttggaaatgt	tcctactaat	tataaaaaaa	aaaaggttaa	ctgtaaaaaa	gccttcaggca	
ttgtctttag	gaggcattcc	agaagaagac	attgttacca	taggatgt	cagctctatg	
ttgttattt	ccccctgaaga	ccttctatgt	ggacaggata	tggggggaa	agacagtgc	
attgtgtatc	ctgaccctgt	gttggccat	gctaatagtgt	gtgtgtccctc	gttttaaca	
aaaaaaatgtt	aaaagttttt	aaaaaaa	aaa			1053

<210> 28
<211> 689
<212> DNA
<213> Homo sapiens

<400> 28

ggcacgagat	gagaaccact	gccttgac	ctccagtaga	atgaggcccc	agtgttact	60
gcactggaaag	agtccaggag	cttggtaaaa	gtcagatag	actgattcca	ccccagaatg	120
gacaccgaga	aatcttggat	cccaagagtt	tggttggctt	tatcatgccc	cttagtcatt	180
tctgagtggt	tcctcatact	ctgcatccat	tgatgagag	gcaaatttcc	tcatgatctg	240
ctttgctcc	tcatcaagct	actatgcccc	accattgctg	gctctgctt	tggttgctgc	300
aatgttaggca	gchgcttgc	ttgttcttac	cactttAAC	tatcttaaaa	tagaacctga	360
ctctgattct	ccatagaa	gtggaaactg	gctgggtgtc	gtggctcatg	tctgtatcc	420
cggcacttgc	gccttctatc	tgaggctaaa	gcagggggat	cactagagc	caggagtttgc	480
agactagcc	ggcaacata	gtgagaccct	gtctctatca	aaaaattttaaa	aagttagctg	540
ggcgtggtgg	tgcacacctg	tcctctgagc	tctcagctac	ttgggagggct	ggggcaggag	600
gaccgcttgc	gctgtatca	tgccactgca	gtccagcttgc	agtgacagca	caagaccctg	660
tcacaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	689

<210> 29
<211> 1358
<212> DNA
<213> Homo sapiens

<400> 29

ggcacgagtg	cctctctcct	tttcaggca	aatgtcttca	aaaagttaat	tgtatatgct	60
ttcaccatTT	cctcaccttc	cattctctct	tgaggctact	ttaatcaggc	ttttatccca	120
accctccaaac	caaagatgtc	tttatcaagg	gtcagtgac	atcgacattg	ccagacttag	180
tccacatatt	gctaaatctg	tcacaaggct	ttgacacagt	ccatcacttc	ctccctggac	240
actgtctcaa	gtgtctgg	tcctgaatag	cacccctct	tgagatttc	tcctgcct	300
aatggtctca	gccccttgc	ctggctcctc	atctccctag	tctctacaca	tcacttgc	360
gaatgagggg	attatccag	ttttatgct	ttaaatatac	tctcaatgt	tggtatactc	420
aaatgtatata	tcccaattca	gactgtcccc	cgaattccaa	gcttatttac	cccaactatc	480
tcttcaatc	tccacttgg	tatctaatta	tcatgtcaca	cttagatcat	gccaattctt	540
ctcagtctcg	gtaaaaaca	ccaccaacct	agttgtctt	gccaatatac	ttttttttc	600
tttttcttt	ttggagtcag	ggtctcactc	tgtcaactcag	gctggagtgc	agtggcgcga	660
tcatgtctca	ctgcagccct	aacctccctc	ggctcagggt	atcctccac	ctcacactcc	720
caagactctg	ggactacagg	cacatgccc	catgcccagc	taattttagt	atttttgt	780
aagacagggt	tttgcagg	ttcccaggct	ggttgcac	tcctgaat	aagtcatcca	840
cctaccttgc	cctccctgag	ttctgggatt	acaggcatg	gtcattgtgc	ttggctccaa	900
aatctttaaa	gcttatctaa	aatgttctc	ttgatttcat	gccacaaaat	ttgttagctc	960
cacctttaaa	atataattag	attaagacct	ctcttcatca	ccaccctgct	gtcacccctaa	1020
caaagcaacc	atcatcttc	aaaataaaatc	ctaagtctt	tagggcttcc	taggcctact	1080
ctttatgccc	caggctacct	atccagggt	atcttccca	gttctccccc	atgaatttct	1140
gtctcacaga	atgcatgtac	cattgcactt	tgtaacgtca	gtctctccca	ccagacaaatg	1200
atcagatct	tagttgtctc	tttataccca	ttcacagtg	actgactgag	cacaatttta	1260
aggcttcaat	aatggtaag	tgaatgaata	atgaatgaat	gaatgtctaca	atattgatta	1320
taatggataa	agagatata	tgacctgtt	gacagaaaa			1358

<210> 30
<211> 767
<212> DNA
<213> Homo sapiens

<400> 30

ggcacgaggt	aatTTgaaa	cttagctta	agatttaacc	agggcagagg	catatttcag	60
cataaataat	gttgcattt	taaactctta	tccttcctat	ctcaacagga	aatgagcaat	120
tattgctca	tgcttcaatg	cactgtttt	aaatactgtt	taatttggta	aagggtgtaa	180
actgttttaat	ttatctcaca	cgttttttta	aacaaataact	gattggacat	gcgcgtcacg	240
ccaggctttg	ggcttggta	ctcagggtt	tcacagggga	ggctggaagt	gaaaacaagc	300
acatgtgtaa	ctgttggta	gacagtctaa	ttggtagaaaa	atcagcgaac	aaagaagcag	360
acaattttaga	aatgaacgt	aagggtatgt	gctaaaaaga	gggttagccat	tatgtcgtg	420
tccttcagag	aaggtagcac	tcctctgagac	cggaatggc	gaaaagaatc	catctgcct	480
agcccagctt	ggacttgg	agaagcaggc	tgataaaaaa	accaaattat	gtacattttg	540
aagaagtgc	ccgtgactt	gagagagagg	tgttgcgtt	caggtgctg	atgtccttat	600
aaaaagtgt	atatttcgag	catctctatc	aatacatttgc	aatgtctgaga	gctttccctt	660

ccagaagctc atgtcattt caacacacac ttctatttac ctttatgtag tttctaaaaa 720
ttgaaaacca gaattggagg ttttttaaa aaaaaaaaaa aaaaaaaaa 767

<210> 31
<211> 2116
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)..(4)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (7)..(7)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (16)..(16)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (25)..(25)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (35)..(35)
<223> n equals a,t,g, or c

<400> 31

ctcnccnctc	tcctcntgaa	aaccnctata	gggantgctg	gtacgcctgc	aggtaccgg	60
ccggaattcc	cgggtcgacc	cacgcgtccg	aatgaataag	atggggcagc	tggaaagggt	120
acccacagct	aagggccatc	ttattgaacc	cccaagaagt	caaatgtagt	catccctaa	180
caaccacagg	gcaacttgtc	gcgcgcacac	acacacacac	acacaaatat	gcaaatactc	240
attgaactca	actcccttga	ggtttaatg	aataaatata	atccaatttt	caaagtctt	300
aaccacattt	gggaatctaa	gtatttgttc	tcagttatacc	aatgacatata	tcttctggc	360
aaaagaaatt	tcctttcccc	agacaaataa	aactagtaca	aggacgcata	ctctcaacag	420
aaatcctggg	aaatcctgca	agagaagag	aatccctact	actttgttcc	ctgcttcct	480
aaccaagcat	ccgacattcc	aacatcaaag	cttttagtca	ccacatttt	ttagcgttga	540
atatcccttc	tacctccggaa	ccaaaccctg	ccattctgcc	taaactgtgc	ccatatttt	600
agacgttct	caatattat	tttgacccaga	aagtctgacc	tccacagg	atcaacttt	660
ccttccttgc	tctttcttgc	tttcaggccct	actttgacat	tcagctgatc	attccctgtc	720
ttatcttgct	tgtgctcacc	gctgtctgtc	cttttacgtg	tggaggtcag	aaacgtgtct	780
ggttcgtgt	catcacctca	gcaccctgca	caggggatgg	cacaaaacag	ccactcaaaa	840
agtaattgtt	gattacaatt	gatctgacca	tttcctttgg	tgacccttt	gtctttgtgg	900
tagaccaaag	tcatgatctt	tgatccctcc	tgccatgttc	tcagaagcct	tgtcttggg	960
atttggacaa	agtggaccctt	tttataagagg	ttattttttt	cccatccctc	cagctccctc	1020
tttgcgtttt	ttcttagtgc	catagtagca	gatgcacata	cttcaacacc	ctttcttaaa	1080
aattctgagc	tacccataca	ttatttttt	gttaaatttg	aatggaaatt	tgtttgtata	1140
agaatcttc	agtaagagtc	tattatccgt	gttatagatg	tatctcttac	cgtcaaat	1200
tttagtttct	cctgtgttta	cttttcatg	tattttgtat	tttggggacc	tttgtggagc	1260
ttacatttca	gtctttgtta	gcctaattgc	tattcaatata	ctataatcaat	aattgttctt	1320
cccaaagggt	gaagaaaaaa	atggactact	tcaaaacaaa	cacaccattc	agtttcttaa	1380
aagagctgac	ttcacaagac	tgctcagaat	cgcgactggc	agcttctgcc	tttgtgggaa	1440
ggcatgagt	tttagtcatt	tcactgtgtt	ttgcaatcac	agaaagcaga	tcaagggagg	1500
tgggagttgt	agatctcaca	ttttgagccc	tgaatctca	atactgcaga	aaactttcaa	1560
cgacatcact	aaacaattct	accgttcaag	aggctcttta	aacagacctg	tttttacgaa	1620
tggctatttt	ttatattaaa	ccaaaccccc	tgtgtgggtgc	ctgcattt	gtttttttgg	1680
ccccaaacca	ggttgccgaa	gagagtacca	gtacccctat	gaaaggccagc	agaggggttg	1740
gttagactgt	gtttgtatccc	agttcttaga	agagcctcaa	gaaaggactt	tgtgagggtt	1800
taacatctta	agtcctgtg	atcaaaacag	agtcaacatg	agaaatgtga	ggcggtcttc	1860
agagacaqct	ccataaaactq	tctggaggct	qqqaaaaraat	ttgtcatqca	tgcttaatat	1920

gtaaaggact	ctttagaata	aatggaaatt	ggtgatggta	aaaaaaaaaaa	tttaaaaaaaaa	1980
aaaaaaaaaaa	aaaaaaaaaaa	aaaaggcg	ccgctctaga	ggatccaagc	ttacgtacgc	2040
gtgcatgcga	cgtcatagct	cttctatagt	gtcacctaaa	ttcaattcac	tggccgtcgt	2100
tttacaacgt	cgtgac					2116
<210> 32						
<211> 1564						
<212> DNA						
<213> Homo sapiens						
<400> 32						
ggcacgaggc	tgggtgattc	ttctggtctc	aactggattt	actcttgcatt	ctgagttcag	60
ttgtgggtca	gcaggaaact	ttgttctgg	ggtccttgg	ctctttgcca	catcatctta	120
tccttcacta	agcttagcctg	ggcttgcgg	catgggtgt	gcaggatct	aagatagagt	180
aatgtcatgc	aggctcgaaa	ctggccattt	toacttctgc	ctcattttat	aggctaaagc	240
aagtcatgag	gctgggtttc	attcaaggaa	ataagactcca	cctcttgatg	ggaagatagg	300
caaaggatcaca	tggcaaaagg	catggatact	gacaggggagg	ggttagagact	aaggccatt	360
tggcggtcag	cataccaccc	cagcgtcatt	aagcccaact	cacccaggcc	tggcagggaa	420
caaggggctga	aaaaggctgt	gtcaggagga	gataactgag	gattaaatgc	ctcatggAAC	480
aacccacccc	actcaatcca	gcaagaatag	aggcttgaag	cagccagagt	aactacttct	540
ttaagagctt	aatgtttctg	taaaatcttt	tggtaactcaa	atgttgacag	ctgtgttgat	600
cagggtcatg	gcagggtggca	gaaggacact	caaaccattt	actggagaaa	gtttaataga	660
gtgatatatctc	tggaggtaca	ggcaggccaa	ttagatggtg	cagtgcctca	ggactagcaa	720
ggatggggac	ctgttatccc	ccagcctgag	ggacggaggg	aggactggc	tttcaggag	780
gccttggtag	agatggaaact	ggagggtggg	ctgctggcag	gagctgtggc	ctcagaaaaga	840
gggttccagc	cactgcctca	cttgcgttca	aaccaggagg	gagcagggtt	ggtgggatc	900
agataacctaa	acctccctct	cctccaccc	ccctgtctcc	tgccaaaggct	taaccagagg	960
gcaagggggcc	cagggccccc	tgcaggaga	ggaagttgt	gggaaaggca	gaataacaag	1020
cagagaaact	aattttttaa	aaaggtttt	aaaatgttgt	gggtgaaata	aaacacgagc	1080
tatcagttaa	tctgtataac	caatgcaag	tttcatttacc	tctcttgcc	aacttccctca	1140
tcaagaaaaat	gagcatagcc	acatctttt	ttgccttaag	gggagaggga	gaatccctaac	1200
aatatcataaga	catgtttttt	gatgtgtcg	tgatccccc	tgaatctgag	agtcaagcac	1260
tgttgcctcg	gtcatacacaac	atgtatgtgt	tgattctgac	tttgccacc	gtcctattct	1320
cacccttagt	gagaagttaa	ggctcagaga	gtttaagggt	ttgccttaagg	tcaacacagca	1380
cagaagagtc	agtaaattca	tttgcgtggc	ggacacgggt	gctcacttct	gtaatcccg	1440
tactttggga	ggccaagggt	ggaggatggc	tttagccagg	gggttcaaga	ccagcatggg	1500
caaaatagca	agaccctgtc	tctacacaaa	taatttttt	tacttaaaaa	aaaaaaaaaaa	1560
aaaa						1564
<210> 33						
<211> 762						
<212> DNA						
<213> Homo sapiens						
<400> 33						
ggcacgaggc	ttgttttccct	cagctgaggc	aagtggtaga	gtatacagga	taacgaagta	60
acatgtaaaa	ggcaggacgc	acataaaagg	gtacatggct	attgtttcac	ctggagaaac	120
cacatgattt	ggacctgaa	gtttactgac	tgactacagg	ggctgattgt	gaagcacgag	180
gaaccccatg	tgtgtggaga	ctgttaggggt	agagcacaca	attattagca	tcatttctga	240
gtgatctcac	agatttttt	tcttgcgtt	gtttgcctt	ttgacaactg	cttctccccc	300
gttccttgca	attctattct	ctcacccctca	cttacttatt	tgtattcgat	ggaccaggat	360
aattcaggca	aggttacctt	gtaaacttga	attggccaca	caccatgtt	tcacccagct	420
ggctatgaa	tgaataatgg	tactgaaagt	aaacctgaa	acctttctca	gatctatttt	480
aagtctgagt	ctgaccaaaat	atggaaaata	ttcgacatga	attaatgttag	agaactataaa	540
agcattttatg	acagctccaa	gaaaatcat	ctactctatg	caggagat	tttagagac	600
ctctcagaaaa	acttgcctg	gtttgagggt	acacagtacc	attttatct	tctgaaaata	660
tctgtattcc	tgctttttt	ctgctgtcatt	tgtcaatctg	ctatattttt	cactatccct	720
ttaaaatatt	actgtctccct	ttaaaaaaaa	aaaaaaaaaaa	aa		762
<210> 34						
<211> 862						
<212> DNA						
<213> Homo sapiens						
<400> 34						
ggcacgagag	aaaacaggga	tttccctct	ctagatccct	gccaggtccc	tctccaggag	60

gccccctctgc	tctcctgaag	ggtgtccct	gagggtctgc	ccagccttgg	cacgagaggt	120
tggttccagc	ccctggcagg	gcttccttc	aaggcccct	gcagcctaca	aactggccct	180
cgggcactc	aaaataagtg	ctcttgggg	tggctctacc	ccattacctc	ccccagccac	240
aactcctggc	cttcgacttc	tggctgggt	agccagacc	tggttctct	accctgatgt	300
tgcatgagac	ctggtaacag	tgtctccctc	ccagctcctt	gccaaagcct	ctgttgagac	360
ctgggcttct	tgtagccccct	tctccctctg	gccagctgca	cagcctgtgg	gaggtgcccc	420
gcccaggctg	ggtgtgggg	aagctgtcc	ctgctgtgg	tggcgttgg	gacctagggg	480
ctcctctga	ggttggcctt	gtggcctctg	ggctgtatgc	ctctgggtt	taggaaagag	540
gcgggaggag	tcatggggat	ggggagcgc	agggggagag	agggccctc	gacaaaggct	600
tggaaatga	ggggaggtgg	aggcagggca	ggggaaagcga	agagtctagcc	ttggagagag	660
caccctgggg	cctccgttc	gggttacacc	cagcactttt	cgacctgcgg	cccagcaggc	720
gcggaggatg	gcggggagga	agccagcgc	ccctgtgttt	actgtcgtca	gaaagggtctt	780
gtgttttggt	tttgggggtt	ttgttttgtt	tgtttttgtt	ttggcttgg	tgttttttaa	840
ggggaaaaaa	aaaaaaaaaa	aa				862

<210> 35

<211> 1499

<212> DNA

<213> Homo sapiens

<400> 35

gtgcactgt	cagtcgctgt	gtgttttagg	gtctcataacc	cgtgtgcgcc	agcaggacca	60
cagctgtac	cggctgctcc	agaagaagt	ggtgggttga	gaccccaccc	gcagggtcac	120
tggggtagc	aggccctctg	ttagactga	cttctgtatc	atgtcaggga	tttttagggc	180
ggcaagctca	ggtggacagg	cagtttatt	ctgtttccca	tgtcaagtcc	agccccagac	240
tgacttctg	aggtcacaga	cggagctca	ccccatccaa	ggcgggttcc	tggactccca	300
ctgtgtctcc	cagagggcag	ggtgagtgc	ttggcatcctt	ttggcggcgc	tgggtgcctc	360
tgtggacctg	gcgtgaggct	tctctgttcc	tgagtctcc	atggaccatc	tgtcttctgt	420
gtggctgtc	aggaatcaca	ctgggggtgc	cgtgcccgtt	gctgaatgag	aacaggaccc	480
ccatgtcga	cagccctgtc	taacgcggg	gtggccccca	aagcgggtgg	gcgaggctgg	540
gcagcggga	ttggctgaaa	tcatatgcag	agccaaagag	gcagggaaaa	ggcggcaatt	600
tcagggtccc	tttggtcgc	aggtacctgg	ggcccagccc	ggcggcagg	agggactcag	660
cccctcgccc	aggcaggaag	ggtccaagc	agaggccctt	ccctcaggca	ctccccagcc	720
cacacgtcga	gcactggac	caagactaat	aaaacaccccg	cctcacggaa	gacagcttta	780
tcttggtgat	cggaagtctg	ccagccaaat	ttatgatgga	acataagatc	tctaaatctg	840
aatttacact	ctgttagcgt	acgagaggtc	aataagatta	aacgggggt	caggagagga	900
ccagcgtcag	gctcaactgc	aggtgtcga	caaaaaacc	acagccagag	cccttgggc	960
cagcccaggc	aagaccagaa	aaggaggggg	caggtgggg	accagcctgg	ggctcccg	1020
aagcccacgg	gatggggcgc	ggagagccag	gaggcctgg	gcaaccctgg	gacgggttct	1080
ggatcgagga	gagcaggggg	gtgtatgggg	ttccctcagg	gctggggagc	cttctcttg	1140
tctcagaccc	accccccctt	agctccaag	ccctgggtgc	ccctggctt	gaggacagt	1200
gggaatctt	cctgaggcag	gttcaaggac	agagctctga	ccctggccca	gggctgctt	1260
gggtgcctat	gaactcggct	tctggcttag	agcagtcccc	tgcacccctt	cctgagccct	1320
ctgtctctg	gaacccgtgg	gcaggggtgg	ggacgggtgt	tccttctgg	tgggggcctg	1380
ggcgcccaaggc	cagcacgacg	ctggcttgc	gagcttaggg	cagaccccg	cttcagaatt	1440
tatacaaata	aatgcaatga	aaagtgttgg	caacctgaaa	aaaaaaa	aaaaaaa	1499

<210> 36

<211> 2791

<212> DNA

<213> Homo sapiens

<400> 36

ccacgcgtcc	ggattacatg	tagttattga	gaatccttc	gaattcagt	gtttaatcat	60
gaatgtctaa	atattgttga	cattaggat	atacatgtaa	attaaagtta	catttgttta	120
gcataagacaa	gcttaacatt	gttagatgtt	ctttcaaaa	atcatctta	acatttgcat	180
ttggaaattgt	gtttaataga	atgtgtgaaa	cactgttata	gtaaacttca	tcacctttt	240
acttccttat	agtttgaact	tttcagtttt	tgtatgttcc	aaacagttgc	tcaattttaga	300
gcaaattaaat	ttaacacctg	ccaaaaaaag	gctgctgttg	gcttatcagt	tgtctttaaa	360
ttcaaatgt	catgtgactt	ttatcacatc	aaaaaaatatt	tcattaaatga	ttcaccttta	420
gctctgaaaa	ttaccgcgtt	tagtaattt	agtgggttta	aaaaaactat	caacttctt	480
tgatagttat	ttgagaattt	tggtaaaaaa	tattagctg	agggcgtat	agaacttata	540
aaccaatata	ttgatatttt	taaaacattt	ttacatataa	gtttaactgc	atctttgagc	600
ataactacat	ttaaaaataa	agctgcata	ttttaatca	agtgttaac	aaaatttat	660
attttttatt	ttttaaaattt	aaaaataatt	tatatttcct	ctgttgcat	aggattctca	720
tctgtgttta	taatggtag	agattttatt	tgtgtgaaat	gaagtggagc	ttgttagtcat	780

gggtcttagtg	tttcagtttg	ccaaagtctgt	ttactgcagt	gaaattcata	aaatgtttca	840
gtgtgggtt	ctgtagccta	tcatttactg	gctattttt	tatgtacacc	tttaggattt	900
tctgcctact	ctatccagg	gtccaaatga	tatcctacat	tttacaatg	cccttcagt	960
ttcttatttc	ttttccatt	aaattgccc	catgtcccaa	tgtcagttt	gtaagtgtgt	1020
gtgtgtgtgt	ctgtgtgtgt	gtgaatttga	tttcaagag	tgcttagact	ccaaatttgag	1080
agattaaaa	attaatcca	ggcaaaacatt	tttcattgga	atttcacagt	tcattgtaat	1140
gaaaatgta	atccgtgat	accttgcaca	tacagatatg	aatcttggat	attaatgaat	1200
ttgttagtag	cacccgtgat	tgtgtttaa	tgagtttt	tcaaaggatgt	gcattaaaacc	1260
aaagttggca	tactggaaat	gtttatata	agttccattt	ggctactgtat	ggacaaaaaa	1320
tagaaatgccc	ttccatggaa	gagtatttt	cctttaaaaa	attaaaaagg	ttaatttattt	1380
tgaaaaaaaa	aaatcgacc	acgcgtccgg	attacatgt	gttatttgaga	atcctttcga	1440
attcagtgcc	ttaatcatga	atgtctaaat	attgttgaca	ttaggatgtat	acatgttaat	1500
taaagttaca	tttgtttagc	atagacaagg	ttaacattgt	agatgtttct	cttcaaaaat	1560
catcttaaac	atttgcattt	ggaatttggt	taaatagaat	gtgtgaaaca	ctgtatttagt	1620
aaacttcatc	accccttcac	ttcccttagat	tttgaactt	tcagttttt	tagtcccaa	1680
acagtgtc	aatttagagc	aaattatattt	aacaccgtcc	aaaaaaaaggc	tgctgttggc	1740
ttatcagttg	tctttaaatt	caaatactca	tgtgactttt	atcacaatcaa	aaaatatttc	1800
attaatgatt	caccctttagc	tctgaaaattt	accgcgttta	gtaattatag	tgggcttata	1860
aaaacatgca	actctttttt	atagttattt	gagaattttt	gtgaaaaata	tttagctgag	1920
ggcagttatag	aacttataaa	ccaaatatatt	gatattttt	aaacatttt	acatataagt	1980
aaactgcctat	cttgagcat	aactacattt	aaaaataaaag	ctgcatattt	ttaaatcaag	2040
tgtttaacaa	gaattttat	tttttatattt	ttaaaaattaa	aaataatattt	tatttcctct	2100
gttgcattag	gatcttcata	tgtgttata	atgtttagag	attttatttt	tgttgaatga	2160
agtggaggctt	gttagtcatgg	ttcttagtgtt	tcagtttgcc	aagtctgtt	actgcagtga	2220
aattcatcaa	atgtttcagt	gtggtttct	gtacccatc	atttactggc	tattttttta	2280
tgtacaccc	taggattttc	tgcctactct	atccaggatgt	ccaaatgata	tcctacattt	2340
tacaaatgcc	ctttagtta	ctattttctt	tttccattaa	attgcctca	tgtcctaattg	2400
tgcagtttgt	aagtgtgtgt	gtgtgtgtct	gtgtgtgtgt	gaatttgatt	ttcaagagt	2460
ctagacttcc	aatttgagag	attaaataat	ttaatttcagg	caaacatttt	tcattggat	2520
ttcacagttc	atgttaat	aaatgttaat	cctggatgac	ctttgacata	cagtaatgaa	2580
tcttggatat	taatgaattt	gttagtagca	tcttgcattgt	tgttttaatg	agtttatttc	2640
aaagttgtgc	ataaaaacc	agtggcata	cttgcaggatgt	ttatatacaag	ttccattttgg	2700
ctactgtatgg	acaaaaaaaata	gaaatgcctt	cctatggaga	gtattttcc	tttaaaaaaat	2760
taaaaaaggtt	aatttattttt	aaaaaaaaaa	a			2791

<210> 37
<211> 1013
<212> DNA
<213> *Homo sapiens*

<400> 37	ggcacgagcc	tgaagaaaata	tccatggatt	tgattataagg	ttttccctta	gatgctgtgg	60
aggtgttttg	taatattcaa	aatatgccc	tattgcctt	ttaaaaacccc	aaagattatg		120
aattctgaaa	cacatccagc	ccagcggggt	ttggataagg	ggttgttaggc	atthaagcag		180
cctcacataa	tggctgact	tcatccaaaa	catgaaaata	ttacaaggc	aattctattt		240
tttatattt	ttggttcaat	gcttgaacaa	cttgggggtt	tgctggggga	agaaaaaaag		300
aaccaaccct	gagttgtgatt	gttacggaaa	ctaattgactt	tgtttttaaa	ggatcacatt		360
gattcaaacac	cttctattgg	acccagaagt	gcgttaaatat	tacctatggt	agtaaacgtt		420
taatttatcat	tcaagttaaa	tgttggcctt	ctgtatgtag	ccaagaacag	ctcattttgt		480
gaatttcaagt	ttttaagtgg	ctgcttttg	atttgggtgt	attattttat	tataatgtat		540
ttgcaagttat	ataaaaaaat	taacatttag	ccataaaaaat	cccccaaatat	gttcaaggac		600
ttcataattt	aaaatataaa	gaaaacaatc	cttacttctt	tttacaaaaaa	caaaatcatg		660
ggaatttttc	ttttctatat	atttagttat	aaatctttct	ctgggcggg	cgtggtggtc		720
cacggccagta	atccccagcac	tttgggaggc	tgagacaggc	gaatcagcag	gtcaggagtt		780
cggagaccagc	ctggccaaca	tgtgtaaacc	ccgtctctac	tggaaataca	aaaaatttagc		840
tggacacgggt	ggcaggcacc	tgtgtgtggc	gggcgcggc	tactcaggag	gctgaggcag		900
gagaatcgct	tgaacccagg	aggcagaggt	tgcagtgagc	caagattgcg	ccactgcact		960
ccagcctagg	tgacagtgcg	agactctgtc	tcaaaaaaaaaa	aaaaaaaaaa	aaa		1013

<210> 38
<211> 718
<212> DNA
<213> *Homo sapiens*

<400> 38 ggcacgagac cccctgcccc cgtgacccctg acccacactg gcttgggagc agggatctc 60

tttgcacatca	tcctgggtgac	tggggctgtt	gccttggctg	cttactccta	cttcggata	120
aaccggagaa	caatcggtt	ccagcattt	gagtcggaag	aggacattaa	tgttgcagct	180
cttggcaagc	agcagcctga	gaatatctcg	aaccccttgt	atgagagcac	aacctcagct	240
cccccaagaac	cttcctacga	cccccttcacg	gactctgaag	aacggcagct	tgagggcaat	300
gaccccttga	ggacactgtg	agggcctgga	cgggagatgc	cagccatcac	tcactgcccac	360
ctggccatc	aactgtgaat	tctcagcacc	agttgcctt	taggaacgta	aagtccctta	420
agcactcaga	agccataacct	catctctctg	gctgatctgg	gggttggttc	tgtgggtgag	480
agatgttgg	ctgtgcccac	ccagtagacgc	ttccctcctct	gacccttgg	cttttcttcc	540
tttgtactct	tcagctggca	cctgctccat	tctgcctac	atgatggta	actgtgatct	600
tttccctgt	ttagattgta	agcctccgtc	tttgatccc	agcccttagc	ccagtgccctg	660
acacaggaac	tgtgcacaat	aaaggtttat	ggaacagaaaa	aaaaaaaaaa	aaaaaaaaaa	718
<210> 39						
<211> 374						
<212> DNA						
<213> Homo sapiens						
<400> 39						
ggcacgagag	cttattcatt	gaaggagtaa	gtggctgctc	actcctttct	gctgaaactc	60
tttcctgtcc	tttgtaccta	gtgtggaaatg	ggagcagggt	cacagtaaa	gagctgaatc	120
tccccaccca	cccacactgc	agcaggctgc	ggctggccga	tttgttaatt	gccgagcagg	180
aacacagcag	caagctgcgg	caccctact	tgctacagt	gatggctgtg	tgtctctccc	240
aggaccttaga	gaaaaccgc	cttgcgtacg	agcgcacatcac	tatcggcaca	ttgttcagtg	300
tccttcatga	acgagtaaac	tgctgtttcc	gtggattttc	aaaaaaaaaa	aaaaaaaaaa	360
aaaaaaaaaa	aaaa					374
<210> 40						
<211> 1410						
<212> DNA						
<213> Homo sapiens						
<400> 40						
ccacgcgtcc	ggtccttagg	agataagagt	atcttgacaca	gcaggtgcag	gtttcccagc	60
agctcaggca	agagtccgat	gtttgtcaca	tctgatcctg	atgtctggag	agatagccat	120
gtgtgaggct	gaatttggca	atgacaaggc	cagggagccg	agcgtgggtg	gcaggtggcg	180
agtgtctgg	tacgAACGGT	tttgtcagcc	atgtctggtc	gaactgctgg	gctctgctct	240
cttcatcttc	atcgggtgcc	tgtcggtcat	tgagaatggg	acggacactg	ggctgctgca	300
gccggccctg	gcccacgggc	tggcttggg	gctcgtgatt	gccacgctgg	ggaatatca	360
tggtgacac	tccaaccctg	cggtgtccct	ggcagccatg	ctgatcgag	gcctcaacct	420
gtgtatgctc	ctcccgta	gggttcaca	gtgtctcggg	gggatgctcg	gggctgcctt	480
ggccaaaggcg	gtgagtcctg	aggagagggt	cttggatgc	tctggccgg	cctttgtgac	540
agtccaggag	caggggcagg	tggcaggggc	gttgggtggca	gagatcatcc	tgacgacgct	600
gctggccctg	gctgtatgca	tgggtgccc	caatgagaag	acaaaggccc	ctctggccccc	660
gttctccatc	ggcttgcgg	tcaccgtgg	tatcctggct	ggggggccctg	tgtctggagg	720
ctgcatgaat	cccgccctg	ctttggacc	tgcgggtgg	gccaaccact	ggaacttcca	780
ctggatctac	tggctggcc	cactcctggc	tggcctgctt	gttggactgc	tcattaggt	840
cttcatttgg	gatggaaaga	cccgctcat	cctgaaggct	cagtgaagca	gagctcgtgg	900
gattccctgt	gctccagggt	tcctcagctc	acctgtccca	gactgaggac	agggggagttc	960
ctgcatttcc	tggcaggggc	gaggccccaga	ggagcggacc	cctgcttcca	ctgcttgggc	1020
ctgtttctc	agatagactg	actgctgagg	aggctctagg	ttcttggaaat	tcctttgtgc	1080
tcatcagaga	cccccagctg	gggaacacgc	tggccgcact	gcccagagag	cagtgcacac	1140
accacaacac	gagcgtgttt	cttgcggagga	atgtccccga	gttggacaag	gaggctgttt	1200
ctgcacatca	gctcatttcc	cgcacccat	ttctgtcttgc	attgcttgc	tggggccctg	1260
gccacttcct	tgttctcaa	gctgacaatt	ctcactttgc	aataaatagt	ccagtgtttc	1320
cttccaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1380
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1410
<210> 41						
<211> 1493						
<212> DNA						
<213> Homo sapiens						
<400> 41						
tcgaccacg	cgtccggaaag	taatgatgac	aaaatactct	aaccttcct	tggagagtca	60
taacttctcg	ctgactgctt	cacctttac	aagtctgcc	atccggaaag	taatgatgac	120
aaaatactcc	aaccttttct	tggaaagtca	taacatctca	ctgactgaac	attccagtgt	180

gccagtggaa	aaaaatatac	ctttagaacg	acttctgct	gtagaactca	catgtcagtt	240
cacaacttct	ggggatgtga	attcagtaaa	tgtgacttgg	aaaaaaagggg	atgaacaact	300
taagaattac	catgtcagtg	ccacagaagg	catcctgtat	acccagatac	agttttccat	360
cattaatgc	gaacaactgg	gaagctattc	tttgcctt	gaagagaaa	aggaacgaag	420
gggcacattt	aatttcggag	tccctgaagt	tcagagaaaa	aacaaaccat	tgtactactta	480
tgtggggat	tccgttgc	tgggtgttaa	atgcgcacac	tgtgcctt	taaattggac	540
ctggtagt	ggtaatagga	gtgtacaggt	tcctcttgc	gttcacatga	ataaaaagta	600
tgcgtacat	ggAACAAACG	cgaatgaaac	aaggcttaag	ataatgcgc	tttcagaaga	660
cgataaagga	tcttattgg	gccatgcaat	gttccagtt	ggcgagagcc	aagaaagtgt	720
tgaactgggt	gtgataagtt	atttggtgcc	cctcaaaacca	tttcttggaa	tagttgtga	780
agttattctt	tttagtggcta	ttattctgtt	ttgtgaaatg	cacacccaaa	agaaaaagat	840
gcacatggat	gttggaaag	aatttgaaca	agttgaacag	ttgaaatcag	acgatagcaa	900
cggcatagaa	aataatgcc	ccaggcacag	aaaaaatgaa	gctatgagcc	agtggaaagca	960
aaacatcg	tcaagagtaa	tgggaagat	tatagtttct	acttcagctt	tgtttatgtt	1020
tcctgtgaag	aacatctgag	ttttttttt	tacaaggat	aaaagtttat	gtatgtct	1080
cagcgtatg	tttgcataaa	tacctgctat	ctcagatcc	aagatatttt	ttccttctgt	1140
gattattta	cattaaagca	aggttaatca	tattaaatat	gttctatgag	ctataaccca	1200
ggataactaa	tttcatctt	gtcatcaagg	gtgcacaga	agagatacca	gcaaaaccag	1260
tttagtagtac	atgaactaat	gtcattcaag	acctgcgtat	aaccaaagaa	ttcattaaag	1320
agaaaacttt	tttgccattt	gccttgkttt	ttttctaat	tatgcttact	atgtgtagaa	1380
atattgtaa	taattttcat	gtaatgkta	ccctctgtca	tattggataa	aaacatcttt	1440
attaagaaat	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaggccggc	cgc	1493
<210> 42						
<211> 1557						
<212> DNA						
<213> Homo sapiens						
<220>						
<221> misc_feature						
<222> (1)..(1)						
<223> n equals a,t,g, or c						
<220>						
<221> misc_feature						
<222> (9)..(9)						
<223> n equals a,t,g, or c						
<220>						
<221> misc_feature						
<222> (1347)..(1347)						
<223> n equals a,t,g, or c						
<220>						
<221> misc_feature						
<222> (1527)..(1527)						
<223> n equals a,t,g, or c						
<220>						
<221> misc_feature						
<222> (1533)..(1533)						
<223> n equals a,t,g, or c						
<400> 42						
natcccant	cctataggga	agctggtagc	cctgcaggta	ccggccgg	atccccgggt	60
cgaccacgc	gtccgaaaat	catcaactaa	gaagggcc	tcaatata	gaacgttagc	120
ctgtggagct	gtaatgtga	tggagacaag	atttagtga	tagctctg	acctgcctgg	180
tgttcctt	agtttcttta	tccttagatt	tgacagctga	gaaatctagg	tggattcata	240
ttcgtaatca	ttgattaaca	tgcacattt	ggttgcaca	tttttgcata	tcatatcattt	300
ttctccgtt	tctattaaag	aacatgctt	aggggaacta	ttaatagccc	accagtccgg	360
taggcagcat	tcaatcctt	tatgcctt	ttcgccacct	gttggaggtt	ttcttctgaa	420
acaaagaaga	aatagacaaa	tcaatgtc	ccttggaa	atgtggccca	gatttctcta	480
ctcccaagct	ccaaaaaaagg	catacattgg	atgggctaga	tcaactcctc	ctgagagcc	540
taaattccgc	aaaggttgtt	ttccatgtaa	gggtgtggta	caatggggaa	cgccgtatgt	600
tggagggaaag	caggaggact	ttagagtgg	gttgcattct	aatctctctg	ccgcttcaac	660
tatgtgacct	ggggcaaata	tatgagcc	tttccttata	tttaaaatga		720

agagaagtaa tacctacctt	gtagggctgt	tgtgaggatt	aatgaagta	atgcatacag	780
tgcctaaca	agtatttaac	atcatat	ttaaaagctc	atgaaatatt	840
ccttccctc	tttctat	ctctccgtt	ccctttctc	tccctctct	900
tccttcagat	gttagtctaa	aacagcacct	tgatctaag	cagcacctt	960
agactgc	aagaatgtct	agttgcac	ccttccgt	tgtggcctaa	1020
tggatcaata	gtttaat	tttattgaac	tgttaat	tgactatgga	1080
ctttactgt	tttctgtata	tttactttg	cttgaagtgt	ttaatattg	1140
tctgctcatt	tttattgatt	ttctgtattt	tttcaatgaa	aattataata	1200
ttgttaaaaa	aaaaaaa	aaaaaaa	aaaaaaaagg	gcggccgctc	1260
aagcttacgt	acgcgtgc	gcgacgtcat	agctcttcta	tagtgcacc	1320
tcactggccg	tcgtttaca	acgtcngac	tggaaaacc	ctggcgttac	1380
cgccttcg	cacatcccc	tttcgc	tggcgtata	ccaacttaat	1440
cgccttc	aacagtgc	cagcctgaat	ggcgaatggg	acgcgcctg	1500
ttaa	cgcg	cggtgtgg	ggttacncgc	agngtgaccg	1557
			ctacacttgc	cagcgcc	

<210> 43

<211> 1013

<212> DNA

<213> Homo sapiens

<400> 43

ggtagacatcc	cagtgc	cgtgcaggca	aggcacac	gaagcgtgcc	60
aggaggaggc	gctgcggctg	cacgcctgt	gcccgcgt	gacgcgttc	120
gggcgtgtat	ctcccagac	ctgcagcg	cactggccaa	gtatgcggag	180
aggatga	ctgtggaggct	ggcgaggccc	cggacatcca	gcctaagacc	240
cagaggccag	gatgccac	ctgtcc	ggaaaggggc	tgacatcttc	300
ggccctgtc	tgtgttctca	gccaagaacc	ggtggcggct	gttggggccc	360
cccgaggaga	gggcggctt	ggcctcac	ttcggggaga	ctgcctgtc	420
ccgtcattcc	agggagccag	gccgcggc	ctggcctgaa	ggagggc	480
cagtgaatgg	gcagccat	aggtgg	gacacgcg	gttggtgacg	540
ctgcgggaga	ggcg	agcctgc	tgtgtcg	gctgccc	600
ccagcttgg	ggacc	cccgtc	tg	tctagact	660
ggggatcg	ttgca	ccggc	ggggcc	acttcaact	720
ggagccgaaa	ggcc	ggcaagact	gagg	ccctgtg	780
ggcagctcc	gcct	tgaag	gggtggcc	cccagt	840
cgcctcagcc	ctgg	gac	tgagg	cc	900
cctccggca	atgc	cg	gat	ccctgc	960
ttaa	agact	gtc	gg	ctgc	1013

<210> 44

<211> 986

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (131)..(131)

<223> n equals a,t,g, or c

<400> 44

ccgagttgac	cccacgg	gagatgtcc	agctgccc	agacagc	60
caggcg	gaat	gg	cc	gtccc	120
cgccgc	ttt	cg	gg	cgaga	180
cagcgaaatc	ctc	ac	gg	at	240
tctgaagtt	tca	acc	tt	tt	300
tagttaggt	gt	gac	ct	cc	360
acttgattt	caga	gt	ct	ca	420
aaa	gggg	at	cc	at	480
aagcattata	act	tt	cc	ttt	540
tatggaaaat	gt	tt	cc	ttt	600
agactgt	aa	ca	gg	ttt	660
gaacagaata	at	at	gg	ttt	720
aattgtc	at	at	gg	ttt	780
gat	ttt	ttt	gg	ttt	840
taa	at	ca	gg	ttt	900
aa	at	ttt	gg	ttt	960

986

gaaaaggccaa aaaaaaaaaaa aaaaac

<210> 45
<211> 810
<212> DNA
<213> Homo sapiens

<400> 45

ggcacgagat tcaaggctac tatcgccagt atcgtcagga gcctgtcagg tttggaaaca 60
tcggcttcgg aacccttac tactatgtgg gctggtacga gtgtgggtc tccatccctg 120
gaaagtggta atcacaggac cgtcatgtg caagttgcc ctgcccagcc ccaccaacta 180
agtcgcacta ggggctgtga gcaaagacag ccagcgtgct cagccccgt gccctaggtg 240
ccaggaaggt catagatggc cactggccat tctggtcatc tcagtctgaa actcagtccc 300
acttcttgc ctggacaatg aacaggattc agtttgcgt ttaactttgc ttctctactt 360
ttttttttt gttttaata gcacatccca gagacatcg aaaccagcaa ctgattcagt 420
gtgatttcca gacttttag gcatgaaatt cggacacttc agtatttcca ggaatagcat 480
atgcacgctg ttcttgcctc atggaatgtct acatgcttgc tgttttctc attttggatt 540
tctccaaac taactgaatt taagcttcag gtcccttgc atgcagttaga aaggaattat 600
taaaaacacc accaaagaaa ataaatataat cctacttgc atttactcta tggacttacc 660
cactgctaga ataaatgtat caaatcttat ttgtaaattc tcaattttga tatatatatg 720
tatatatgca tatacatatc cacacttgc tgcaagaata ttgattaaa ttgctaaatt 780
tgtacttgc ttggaaa 810

<210> 46
<211> 880
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (864)..(865)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (868)..(868)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (878)..(878)
<223> n equals a,t,g, or c

<400> 46

gggcacgagc tttgacccat tcaaggatgt ctctgcctgg agaactagat cctgactcag 60
tggcagcata ggttctcccc cagggtgggt ctgaacttca gctcagaagc agcctggacc 120
ccatcttacc tccagataag gtgttttag tactctgtt ccagtgttag tgcaacttag 180
tttaaaaata gaggacttgt tcacagttat ctctaagtct cacaactggag ttgttgc当地 240
cataaagtag gtgtatgttgg agcagaggca agtctagaaa ttgccttaa attatttgc当地 300
gtactctaga gaaacgtggta tttgtatgtt tttatgtgt tttgaatata ggaactagtt 360
cattgaacgt tagattgttca taagaccaga attagattaa aaatgcataa catattaagt 420
attaaaaaagt gtttatatttgc tatatgttatttgc ttttgc当地 agttagctt ggcatttttag 480
gttttaatttgc atgcttaatc ttgttttttttgc atgtactgtt ttttaaagta ttctaaatttgc 540
gttttttttttgc accatcttca gtatggaaaaa ttgtc当地 ttttgc当地 ttctaggccaca 600
attagattttgc ttttgc当地 ttgttgc当地 ttgttgc当地 ttgttgc当地 ttgttgc当地 660
gagtcaagag agtattacc agccaattaa gaaaaatgtt accaaggcaga ttgc当地 720
caataaaaacc atcggttgc cttttgc当地 ttgttgc当地 ttgttgc当地 ttgttgc当地 780
aaagtcttca aggaatgttcc ttgttgc当地 ttgttgc当地 ttgttgc当地 ttgttgc当地 840
aaaaaaaaaa agccgaggkg ggc当地 ncc aaggccntg 880

<210> 47
<211> 1668
<212> DNA
<213> Homo sapiens

<400> 47

gggaaactgcc	aaaagtgtgc	atttggctac	agtggactcg	actgtaaagga	caaatttcag	60
ctgatccctca	ctattgtggg	caccatcgct	ggcattgtca	ttctcagcat	gataattgca	120
ttgattgtsa	cagcaagatc	aaataacaaa	acgaaggata	ttgaagaaga	gaacttgatt	180
gacgaagact	ttcaaaatct	aaaactgcgg	tcgacaggct	tcaccaatct	tggagcagaa	240
gggagcgtct	ttcctaagggt	caggataacg	gcctccagag	acagccagat	gcaaattccc	300
tattcaagcc	acagcagcat	gccccggcct	gactattaga	atcataagaa	tgtggaacccc	360
gccatggccc	ccaaccaatg	tacaagctat	tatttagagt	gtttagaaaag	actgtatggag	420
aagtggcac	cagtaaagat	ctggcctccg	gggttttct	tccatctgac	atctgcccagc	480
ctctctgaat	ggaagtgtg	aatgtttca	acgaatccag	ctcacttgct	aaataagaat	540
ctatgacatt	aaatgttagta	gatgcttata	gchgctgtca	gagaggtgg	tttcttcaat	600
cagtacaaaag	tactgagaca	atgggttaggg	ttgttttctt	aattctttc	ctggtagggc	660
aacaagaacc	atttccaatc	tagaggaaaag	ctccccagca	ttgcttgctc	ctgggcaaaac	720
attgctcttg	agtttaagtga	cctaattccc	ctgggagaca	tacgcatcaa	ctgtggaggt	780
ccgaggggat	gagaagggat	accacccacc	tttcaagggt	cacaagctca	ctctctgaca	840
agtcaagaata	gggacactgc	ttctatccct	ccaaatggaga	gattctggc	acctttgaac	900
agcccgagc	tttgcacaccta	gcctcaccca	agaagactgg	aaagagacat	atctctcagc	960
tttttcagga	ggcgtgcctg	ggaatccagg	aacttttga	tgcttaattag	aaggcgttga	1020
ctaaaaatgt	ccactatggg	gtgcactcta	cagttttga	aatgtctagga	ggcagaaggg	1080
gcagagagta	aaaaacatga	cctggtagaa	ggaagagagg	caaaggaaaac	tgggtgggga	1140
ggatcaatta	gagaggaggc	acctgggatc	caccttcttc	cttaggtccc	ctccctccatc	1200
agcaaaggag	cacttctcta	atcatgcccct	cccgaaagact	ggctgggaga	aggtttaaaa	1260
acaaaaaaatc	caggagtaag	agccttaggt	cagttgaaa	ttggagacaa	actgtctggc	1320
aaagggtgcg	agagggagct	tgtgctcagg	agtccagccg	tccagctcg	gggtgttaggt	1380
ttctgaggtg	tgccattggg	gcctcagcct	tctctggtga	cagaggctca	gctgtggcca	1440
ccaaacacaca	accacacaca	cacaaccaca	cacacaaaatg	ggggcaacca	catccctgatc	1500
aagcttttac	aaatgtttt	agtgtccctt	tttatttcta	atgccttgc	ctctaaaag	1560
tttattttttt	tgttattttt	atttggtttt	gactgttaat	tgtgaatgg	aatgcaataa	1620
agtgcctttg	ttagatggaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1668

<210> 48
<211> 851
<212> DNA
<213> *Homo sapiens*

```

<400> 48
cacgagagaaa ggtggttatt tatacaaaca tggacatact cactcccaag ggctgatgag 60
atgctgaatt ttctttgggg gcattcatta attgtcccaag ctgcagcgcac tggagcaagt 120
cttggaaagctg cctgtctaa gaccacccaa ctgtccctgg gttctcatcc tagggccctc 180
tttgcgttcca ggtcagggga cctgtctcaa tgagaaagca actgaattga ggcttaggaga 240
ggtagggaga gctgagttct gacttcacct gtgcagaact ctctgcccccc atgttacctg 300
gacttggaaaca gactgtgaat atagcagaag gttccaagaa ctctgggtgc tgacactgaa 360
gaggcacagt tcttctact ggaaagaaaaa cgatgttagcc gattgcacaa gggtgccaag 420
ggaagaccca ggatggccca tcaaaggAAC ctgggggagg atgcaggagg ctgaaggat 480
gcacctggca ttctctcac tggctctta ccgcattcagc aaccccaac ttttggccct 540
actctgcccccc ccatgcgtga ataccctgct tggatgtctgt gctttccgg tttgtctcta 600
agcccccttc tccaggcgtat gttgggttcc ctggcctctc achtgtctaa ctggagccca 660
gagtgccttgc ttctgagccaa ggagacggct ggcactggc cttccacacc taagcgtct 720
tttacattaaac ttattggct tttataacac ctgtgtccat tgccaaagtgg ctgtgtccctc 780
agctacagag ctgaaattgt gtgggggttta gtgtctaaata cttcaataaaa gtctgttttt 840
tgtgattggc t 851

```

<210> 49
<211> 511
<212> DNA
<213> *Homo sapiens*

```
<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c
```

```
<400> 49
naggcccatt ttactttgcc cccctcggtt ttctgtcaag caggtcaata tatctcttta 60
tccattataa tcaatattgtt agcatttcattt catttcattt tcatttactt accattttttt 120
gaagccttaa atttgtgtctc agtcagtgca ctgtgaatgg gtataaagag acaactaaga 180
atctgtatcat tgcttgatgg qagagacttga ctttacaaag tggatgttgcatgttctc 240
```

gtgagacaga aattcatgga ggagaactgg aagagattca cctggatagg tagcctgggg	300
cataaaagagt aggcctagga agccctaagg acattaggat ttatttttag agatgatggt	360
tgctttgtta gggtgcacgc aggggtgtga tgaagagagg tcttaatcta aatatatttt	420
aaaggtggag ctaacaaatt ttgtggcatg aaatcaaaga gaacattta gataggctt	480
aaagattttg gagccaagca caatgactca t	511
<210> 50	
<211> 817	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> misc_feature	
<222> (778)..(778)	
<223> n equals a,t,g, or c	
<220>	
<221> misc_feature	
<222> (791)..(791)	
<223> n equals a,t,g, or c	
<220>	
<221> misc_feature	
<222> (801)..(801)	
<223> n equals a,t,g, or c	
<400> 50	
ggcacgaggt taattttgaa actttagtctt aagatttaac cagggcagag gcataatttca	60
gcataaataa tggccattt ataaaacttctt atcccttcata tctcaacagg aaatgagcaa	120
ttatttgcattt atgcttcaat gcactgtttt aaaatactgt ttaatttggt aaaggtgtga	180
actgtttat ttatctcaca cgtttttta aacaataactt gattggacat ggcgtgcacg	240
ccaggcatttggcgttgc ctcagggttc tcacaggggg ggctgaaagt gaaacaagc	300
acatgtgtaa ctgttggta gacagtctaa ttggtagaaa atcagcgaac aaagaagcag	360
acaaattttaga aaatgaacgt aaggtgatgt gctaaaaaga gggtagccat tatgtcagtg	420
tccttcagag aaggttagcac tccctgagac cggaaatggca gaaagaagtc catcctgcct	480
agccccagctt ggacttgggg agaagcaggc tgataaaaaga accaaatattt gtacatttt	540
aagaaggttgc ccgctgactt gagagagagg tggcgtt caggtgctga atgtccttat	600
aaaaagggtga atatttcgag catctctatc aatacattt aatgctgaga gctttccctt	660
ccagaagctc atgtcattttt caacacacac ttcttatttac ctttatgttag ttctaaaaaa	720
ttgaaaaacca gaattggagg tttttttaaa aaaaaaaaaa aaaaaaagccg aggkgggnaa	780
agtamaaatg ngcctkwcgc nttcccttcc cccgtcc	817
<210> 51	
<211> 762	
<212> DNA	
<213> Homo sapiens	
<400> 51	
ggcacgaggt ttgttttctt cagctgaggc aagtggtaga gtatacagga taacgaagta	60
acatgtaaaa ggcaggacgc acataaaagggt gtacatggctt attgttccat ctggagaaac	120
cacatgatttggaccttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt	180
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	240
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	300
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	360
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	420
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	480
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	540
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	600
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	660
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	720
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	780
gttgcatttgc acatgtttttt ttgttgcattt ttgttgcattt ttgttgcattt ttgttgcattt	817
<210> 52	
<211> 1417	
<212> DNA	
<213> Homo sapiens	

tgtatgttat	ttgagaattt	tggtaaaaaa	tat tagctg	aggcagttat	agaacttata	540
aaccaatata	ttgatatttt	taaaacattt	ttacatataa	gtaaaactgcc	atctttgagc	600
ataactacat	ttaaaaataa	agctgcata	ttttaaatca	agtgtttaac	aagaatttat	660
attttttatt	ttttaaaaatt	aaaataattt	tatatttctt	ctgttgcatt	aggattctca	720
tctgtgttta	taatgggttag	agattttttt	tgtgtggaaat	gaagtgaggc	ttttagtcat	780
ggttctagtg	tttcagtttg	ccaaagtctgt	ttactgcagt	gaaatttcac	aatatgttca	840
gtgtgggtt	ctgtacgccta	tcatttactg	gctatttttt	tatgtacacc	ttttaggttt	900
tctgcctact	ctatccagtt	gtccaaatga	tatcctacat	tttacaatgt	ccctttcagt	960
ttctattttc	ttttccattt	aaattggccct	catgtccctaa	tgtgcagttt	gtaagtgtgt	1020
gtgtgtgtgt	ctgtgtgtgt	gtgaatttga	tttcaagag	tgcttagactt	ccaaatttgag	1080
agattaataa	atthaattca	ggcaaaacattt	tttcatttggaa	atttcacagt	tcattgtaat	1140
gaaaatgtta	atccctggatg	acctttgaca	tacagtaatg	aatcttggat	attaatgaat	1200
ttgttagtag	catcttggatg	tgtgttttaa	ttagtttattt	tcaaaatgtt	gcattaaacc	1260
aaagtggca	tactggaaat	gtttatatac	agtccattt	ggctactgtat	ggacaaaaaaaa	1320
tagaaatgcc	ttccatggaa	gagttttttt	cctttttttttt	ttttaaaaagg	tttaattttttt	1380
tgaaaaaaaaaa	aaatcgaccc	acgcgtccgg	attacatgtat	gttatttgaga	atcccttcgaa	1440
attcagtgcc	ttaatcatga	atgtcttaat	attgttgaca	tttagatgtat	acatgttaat	1500
taaagttaca	tttgtttagc	atagacaagc	ttaacattttt	agatgtttct	cttcaaaaaat	1560
catcttaaac	atttgcattt	ggaattttgt	taaatagaaat	tggtgaaaca	ctgttattgt	1620
aaacttcatc	accccttctac	ttcccttata	tttgaactttt	tcagtttttt	tagttcccaa	1680
acagttgctc	aatttagagc	aaattaattt	aacacccgtcc	aaaaaaaaggc	tgctgttggc	1740
ttatcagggt	tcttttaaaat	caaatactca	tgtgactttt	atcacatcaa	aaaatatttc	1800
attaatgatt	cacctttagc	tctgtttttt	accgcgttta	gttattatag	ttggccttata	1860
aaaacatgca	actctttttt	atagtttttt	gagaattttt	tgaaaaaaaat	tttagcttag	1920
ggcagtatag	aacttataaa	ccaaatatttt	gatattttta	aaacattttt	acatataagt	1980
aaactgcccc	ctttagccat	aactacattt	aaaaataaaag	ctgcataat	ttaatcaag	2040
tgtttaacaa	gaattttat	tttttttttt	ttaaaattaa	aaataatttt	tatttccctt	2100
gttgcattag	gattctcattc	tgtgtttata	atgttttagag	atttttttt	tgtgttagat	2160
agtggggctt	gtatgtatgg	ttcttagtgg	tcagtttgc	aagtctgttt	actgcagtga	2220
aattcatcaa	atgtttctgt	gtgstyytct	gtagycatc	atttactggc	tatttttttt	2280
tgtacaccc	taggatttt	tgcctactct	atccagttgt	ccaaatgata	tcctacattt	2340
tacaaatgcc	ctttcagttt	ctattttctt	tttccattaa	attgcccctca	tgtcctaatg	2400
tgcagtttgt	aagtgtgtgt	gtgtgtgtct	gtgtgtgtgt	gaatttgatt	ttcaagagt	2460
ctagacttcc	aatttgagag	attaaataat	ttaatttcagg	caaacatttt	tcattggat	2520
ttcacagttc	atgttaatga	aaatgttaat	ccttggatgac	ctttgacata	cagtaatgaa	2580
tcttggatat	taatgaattt	gttagtgaca	tcttggatgt	tgttttaatg	agtttatttc	2640
aaagtgttgc	attaaaaacaa	agttggccata	ctggaaatgt	ttatatacaag	ttccattttgg	2700
ctactgtatgg	acaaaaaaaata	gaaatgcctt	cctatggaga	gtatttttcc	tttaaaaaaaat	2760
taaaaaggtt	aatttttttg	aaaaaaaaaa	acn			2793

<210> 54
<211> 393
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (214)..(214)
<223> n equals a t q or C
```

<400> 54

aattccggcac gagagcttat tcattgaagg agtaagtggc tgctcaactcc tttctgtga
aacttttcc tgccttgcga gccttagtgcg gaatgggagc agggtcacag taaaagagct
gaatctcccc acccaccac actgcagcag gctgcggctg gccgacttgt taattccga
gcaggaaac acgcagcaagc tgccggcacc cctnacttgc tacagttgtat ggctgtgtgt
ctctcccaagg accttagagaa aaccgcstt gtgtacgagc gcatcaactat cggcacattg
ttcatgtcct tcatgaacgr gtaaaactgt gtttccgtgg rttttcaaaa aaaaaaaaaaa
aaaaaaaaaa aaaaaaaaaaag ctcggggata ggc

<210> 55
<211> 261

<212> PRT
<213> *Homo sapiens*

<400> 55

Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys

1	5	10	15
Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu			
20		25	30
Arg Phe Val Gln Pro Cys Leu Val Glu Leu Leu Gly Ser Ala Leu Phe			
35	40		45
Ile Phe Ile Gly Cys Leu Ser Val Ile Glu Asn Gly Thr Asp Thr Gly			
50	55	60	
Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile			
65	70	75	80
Ala Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala Val Ser			
85	90		95
Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu Leu Pro			
100	105		110
Tyr Trp Val Ser Gln Leu Leu Gly Gly Met Leu Gly Ala Ala Leu Ala			
115	120		125
Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala Ala			
130	135		140
Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala Leu Val Ala			
145	150	155	160
Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys Met Gly Ala			
165		170	175
Ile Asn Glu Lys Thr Lys Gly Pro Leu Ala Pro Phe Ser Ile Gly Phe			
180	185		190
Ala Val Thr Val Asp Ile Leu Ala Gly Gly Pro Val Ser Gly Gly Cys			
195	200		205
Met Asn Pro Ala Arg Ala Phe Gly Pro Ala Val Val Ala Asn His Trp			
210	215	220	
Asn Phe His Trp Ile Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu			
225	230	235	240
Val Gly Leu Leu Ile Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu			
245		250	255
Ile Leu Lys Ala Gln			
260			

<210> 56
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 56			
Met Met Thr Lys Tyr Ser Asn Leu Ser Leu Glu Ser His Asn Phe Ser			
1	5	10	15
Leu Thr Ala Ser Pro Leu Thr Ser Leu Pro Ile Pro Glu Val Met Met			
20		25	30
Thr Lys Tyr Ser Asn Leu Phe Leu Glu Ser His Asn Ile Ser Leu Thr			
35	40	45	

Glu	His	Ser	Ser	Val	Pro	Val	Glu	Lys	Asn	Ile	Thr	Leu	Glu	Arg	Pro
50							55					60			
Ser	Ala	Val	Glu	Leu	Thr	Cys	Gln	Phe	Thr	Thr	Ser	Gly	Asp	Val	Asn
65							70			75			80		
Ser	Val	Asn	Val	Thr	Trp	Lys	Lys	Gly	Asp	Glu	Gln	Leu	Lys	Asn	Tyr
										90			95		
His	Val	Ser	Ala	Thr	Glu	Gly	Ile	Leu	Tyr	Thr	Gln	Tyr	Lys	Phe	Ser
							100			105			110		
Ile	Ile	Asn	Ser	Glu	Gln	Leu	Gly	Ser	Tyr	Ser	Cys	Phe	Phe	Glu	Glu
							115			120			125		
Glu	Lys	Glu	Arg	Arg	Gly	Thr	Phe	Asn	Phe	Gly	Val	Pro	Glu	Val	Gln
							130			135			140		
Arg	Lys	Asn	Lys	Pro	Leu	Ile	Thr	Tyr	Val	Gly	Asp	Ser	Val	Val	Leu
145							150			155			160		
Val	Cys	Lys	Cys	Arg	His	Cys	Ala	Pro	Leu	Asn	Trp	Thr	Trp	Tyr	Ser
							165			170			175		
Gly	Asn	Arg	Ser	Val	Gln	Val	Pro	Leu	Asp	Val	His	Met	Asn	Glu	Lys
							180			185			190		
Tyr	Ala	Ile	Asn	Gly	Thr	Asn	Ala	Asn	Glu	Thr	Arg	Leu	Lys	Ile	Met
							195			200			205		
Gln	Leu	Ser	Glu	Asp	Asp	Lys	Gly	Ser	Tyr	Trp	Cys	His	Ala	Met	Phe
							210			215			220		
Gln	Leu	Gly	Glu	Ser	Gln	Glu	Ser	Val	Glu	Leu	Val	Val	Ile	Ser	Tyr
							225			230			235		240
Leu	Val	Pro	Leu	Lys	Pro	Phe	Leu	Gly	Ile	Val	Val	Glu	Val	Ile	Leu
							245			250			255		
Leu	Val	Ala	Ile	Ile	Leu	Phe	Cys	Glu	Met	His	Thr	Gln	Lys	Lys	Lys
							260			265			270		
Met	His	Met	Asp	Asp	Gly	Lys	Glu	Phe	Glu	Gln	Val	Glu	Gln	Leu	Lys
							275			280			285		
Ser	Asp	Asp	Ser	Asn	Gly	Ile	Glu	Asn	Asn	Ala	Pro	Arg	His	Arg	Lys
							290			295			300		
Asn	Glu	Ala	Met	Ser	Gln										
															310

<210> 57

<211> 117

<212> PRT

<213> Homo sapiens

<400> 57

Met Gly Ser Lys Gly Gly Phe Ile Leu Leu Ile Leu Ala Val Leu

1

5

10

15

Cys Arg Ser Gly His Ser Leu Thr Cys Tyr Ala Cys Ile Asp Arg Glu

20

25

30

Thr Cys Asn Lys Thr Thr Val Cys Ser Val Asn His Asp Ala Cys Leu
 35 40 45
 Leu Val Lys Ala Asp Pro Lys Leu Phe Tyr Arg Gln Cys Trp Lys Phe
 50 55 60
 Asp Asp Cys Ser Tyr Leu Ser Ile Ser Lys Ala Leu Gly Leu Lys Lys
 65 70 75 80
 Leu Gln Tyr Ser Cys Cys Gln Lys Asp Leu Cys Asn Gly Ser Ala Arg
 85 90 95
 Val Ser Gly Met Thr Ala Leu Met Leu Leu Pro Leu Leu Ala Ala Ala
 100 105 110
 Leu Thr Leu Cys Leu
 115

<210> 58
 <211> 135
 <212> PRT
 <213> Homo sapiens

 <400> 58
 Met His Ile Trp Val Cys Thr Phe Leu Phe Ile Ile His Phe Ser Pro
 1 5 10 15
 Phe Ser Ile Lys Glu His Ala Leu Gly Glu Leu Leu Ile Ala His Gln
 20 25 30
 Ser Gly Arg Gln His Ser Ile Leu Leu Cys Leu Leu Ser Pro Pro Val
 35 40 45
 Glu Val Phe Leu Leu Lys Gln Arg Arg Asn Arg Gln Ile Arg Leu Ala
 50 55 60
 Leu Leu Glu Met Trp Ser Arg Phe Leu Tyr Ser Gln Ala Pro Lys Lys
 65 70 75 80
 Ala Tyr Ile Gly Trp Ala Arg Ser Thr Pro Pro Glu Ser His Lys Ser
 85 90 95
 Ala Lys Ser Cys Phe Pro Cys Lys Gly Val Val Gln Trp Gly Thr Pro
 100 105 110
 Asp Val Gly Gly Lys Gln Glu Asp Phe Arg Val Glu Leu His Ser Asn
 115 120 125
 Leu Ser Ala Ala Ser Thr Met
 130 135

<210> 59
 <211> 257
 <212> PRT
 <213> Homo sapiens

 <400> 59
 His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile
 1 5 10 15
 Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu
 20 25 30

Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg
 35 40 45
 Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu
 50 55 60
 Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu
 65 70 75 80
 Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His
 85 90 95
 Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu
 100 105 110
 Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Phe Gly Leu Thr
 115 120 125
 Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser
 130 135 140
 Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val
 145 150 155 160
 Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu
 165 170 175
 Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu
 180 185 190
 Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu
 195 200 205
 Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys
 210 215 220
 Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser
 225 230 235 240
 Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro
 245 250 255
 Gln

<210> 60
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 60
 Met Tyr Ser Phe Gln Lys Glu Ala Thr Phe Leu Leu Pro Ser Leu Phe
 1 5 10 15
 Leu Val Ser Ser Pro Arg Leu Ala Ile Ala Ile Gly Ile Val Met Ala
 20 25 30
 Ser Ile Leu Ser Leu Leu His Pro Tyr Leu Leu Leu Cys Asp Phe Ala
 35 40 45
 Ala Pro Leu Ile Lys Glu Ala Glu Pro Pro Leu Pro Pro Ile Gly Ala
 50 55 60

Gly Phe Glu Ser Asn Arg Met Lys
65 70

<210> 61
<211> 84
<212> PRT
<213> Homo sapiens

<400> 61
Val Ser Arg Arg Gln Ala Arg Arg Met Val Thr Glu Thr Ser Arg Arg
1 5 10 15
Arg Arg Ile Gln Glu Leu Glu Glu Arg Arg Arg Arg Phe Val Glu Ala
20 25 30
Cys Arg Ala Arg Glu Ala Ala Phe Asp Ala Glu Tyr Gln Arg Asn Pro
35 40 45
His Arg Val Asp Leu Asp Ile Leu Thr Phe Thr Ile Ala Leu Thr Ala
50 55 60
Ser Glu Val Ile Asn Pro Leu Ile Glu Glu Leu Gly Cys Asp Lys Phe
65 70 75 80
Ile Asn Arg Glu

<210> 62
<211> 216
<212> PRT
<213> Homo sapiens

<400> 62
Met Asp Phe Glu Phe Ala Ala Trp Gln Met Leu Tyr Leu Phe Thr Ser
1 5 10 15
Pro Gln Arg Val Tyr Arg Asn Phe His Tyr Arg Lys Gln Thr Lys Asp
20 25 30
Gln Trp Ala Arg Asp Asp Pro Ala Phe Leu Val Leu Ser Ile Trp
35 40 45
Leu Cys Val Ser Thr Ile Gly Phe Gly Phe Val Leu Asp Met Gly Phe
50 55 60
Phe Glu Thr Ile Lys Leu Leu Leu Trp Val Val Phe Ile Asp Cys Val
65 70 75 80
Gly Val Gly Leu Leu Ile Ser Thr Leu Met Trp Phe Ile Ser Asn Lys
85 90 95
Tyr Leu Val Lys Arg Gln Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr
100 105 110
Ala Phe Asp Val His Leu Asn Ala Phe Tyr Pro Leu Leu Val Ile Leu
115 120 125
His Phe Ile Gln Leu Phe Phe Ile Asn His Val Ile Leu Thr Asp Thr
130 135 140
Phe Ile Gly Tyr Phe Val Gly Asn Thr Leu Trp Leu Val Ala Val Gly
145 150 155 160

Tyr	Tyr	Ile	Tyr	Val	Thr	Phe	Leu	Gly	Tyr	Ser	Ala	Leu	Pro	Phe	Leu
165									170						175
Lys	Asn	Thr	Val	Ile	Leu	Leu	Tyr	Pro	Phe	Ala	Pro	Leu	Ile	Leu	Leu
180							185						190		
Tyr	Gly	Leu	Ser	Leu	Ala	Leu	Gly	Trp	Asn	Phe	Thr	His	Thr	Leu	Cys
195							200					205			
Ser	Phe	Tyr	Lys	Tyr	Arg	Val	Lys								
210							215								

<210> 63
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 63															
Met	Met	Val	Ser	Cys	Ala	Cys	Glu	His	Leu	Leu	Glu	Leu	Arg	Gly	Leu
1				5					10				15		
Thr	Thr	Ser	Thr	Arg	Trp	Pro	Trp	Leu	Val	Pro	His	Thr	Gly	Leu	Val
				20				25				30			
Leu	Lys	Ile	Arg	Ser	Pro	Arg	Gln	Gly	Glu	Pro	Gly	Ala	Pro	Pro	Leu
				35			40				45				
Ser	Val	Cys	Leu	Ser	Pro	Val	Val	Ser	Leu	Cys	Cys	Cys	Leu	Cys	Leu
				50			55			60					
Cys	Phe	Cys	Leu	Ser	Val	Ala	Met	Ser	Leu	Val	Ile	Phe	Leu	Cys	Pro
	65				70				75				80		
Ala	Ala	Ile	Ser	Ala	Leu	Val	Thr	Ser	Thr	Leu	Leu	Ser	Pro	Arg	Asp
				85				90				95			
Ala	Thr	His	Trp	Gly	Ser	Val	Gly	Glu	Ile	Ala	Leu	Gly	Pro	His	Ala
				100				105				110			
Ser	Ile	Pro	Gly	Trp	Leu	Cys	Leu	Pro	Val	Ser	Leu	His	Val	Ser	Pro
		115					120					125			
Cys	Val	Phe	Leu	Ser	Val	Ser	Leu	Thr	Gly	Arg	Asp	Ala	Glu		
		130					135				140				

<210> 64
 <211> 367
 <212> PRT
 <213> Homo sapiens

<400> 64															
Met	Ser	Ser	Asn	Gly	Ile	Pro	Glu	Cys	Tyr	Ala	Glu	Asp	Glu	Phe	
1				5					10				15		
Ser	Gly	Leu	Glu	Thr	Asp	Thr	Ala	Val	Pro	Thr	Glu	Glu	Ala	Tyr	Val
				20				25				30			
Ile	Tyr	Asp	Glu	Asp	Tyr	Glu	Phe	Glu	Thr	Ser	Arg	Pro	Pro	Thr	Thr
				35				40				45			
Thr	Glu	Pro	Ser	Thr	Thr	Ala	Thr	Thr	Pro	Arg	Val	Ile	Pro	Glu	Glu

50	55	60
Gly Ala Ile Ser Ser Phe Pro Glu Glu Glu Phe Asp Leu Ala Gly Arg		
65 65 70 75 80		
Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser		
85 85 90 95		
Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser		
100 105 110		
Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro		
115 120 125		
Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His		
130 135 140		
Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val		
145 150 155 160		
Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn		
165 170 175		
Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn		
180 185 190		
Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro		
195 200 205		
His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser		
210 215 220		
Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp		
225 230 235 240		
Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly		
245 250 255		
Arg Gln Tyr Val Lys Arg Thr Trp Tyr Arg Lys Phe Val Gly Val Val		
260 265 270		
Leu Cys Asn Ser Leu Arg Tyr Lys Ile Tyr Leu Ser Asp Asn Leu Lys		
275 280 285		
Asp Thr Phe Tyr Ser Ile Gly Asp Ser Trp Gly Arg Gly Glu Asp His		
290 295 300		
Cys Gln Phe Val Asp Ser His Leu Asp Gly Arg Thr Gly Pro Gln Ser		
305 310 315 320		
Tyr Val Glu Ala Leu Pro Thr Ile Gln Gly Tyr Tyr Arg Gln Tyr Arg		
325 330 335		
Gln Glu Pro Val Arg Phe Gly Asn Ile Gly Phe Gly Thr Pro Tyr Tyr		
340 345 350		
Tyr Val Gly Trp Tyr Glu Cys Gly Val Ser Ile Pro Gly Lys Trp		
355 360 365		

<210> 65
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 65
 Met Met Tyr Cys Ile Leu Lys Tyr Ser Asn Cys Ala Phe Leu Tyr His
 1 5 10 15
 Leu Gln Tyr Glu Lys Cys Gln Tyr Leu Val Pro Phe Ser Gly Thr Ile
 20 25 30
 Arg Phe Leu Leu Thr Leu Phe Ser Pro Leu Thr His Val Ile Ser His
 35 40 45
 Ser Asn Gln Glu Ser Arg Glu
 50 55

<210> 66
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 66
 Met Thr Leu Asn Val Val Asp Ala Ile Ser Ala Cys Gln Arg Gly Gly
 1 5 10 15
 Phe Leu Gln Ser Val Gln Ser Thr Glu Thr Met Val Arg Val Val Phe
 20 25 30
 Leu Ile Leu Phe Leu Val Gly Gln Gln Glu Pro Phe Pro Ile
 35 40 45

<210> 67
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 67
 Met Ser Thr Ile Ile Met Val Leu Tyr Ser Arg Ser Lys Cys Ile His
 1 5 10 15
 Phe Ser Tyr Leu Thr Glu Asn Leu Tyr Leu Leu Thr Asn Ile Ser Leu
 20 25 30
 Val Pro Pro Ser Pro Pro Leu Val Thr Thr Ile Ile Phe Phe Ser Phe
 35 40 45
 Phe

<210> 68
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 68
 Met Leu Asn Phe Leu Trp Gly His Ser Leu Ile Val Pro Ala Ala Ala
 1 5 10 15
 Thr Gly Ala Ser Leu Glu Ala Ala Cys Ala Lys Thr Thr Gln Leu Ser
 20 25 30
 Leu Gly Ser His Pro Arg Ala Phe Phe Ala Ser Arg Ser Gly Asp Leu
 35 40 45

Leu Gln
50

<210> 69
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 69
 Met Leu Leu His Phe Cys Tyr Ser Ser Tyr Gln Ser Thr Pro Ile Pro
 1 5 10 15

Gln Cys Cys Phe Ile Leu Phe Val Cys Leu Phe Val Phe Glu Val Glu
 20 25 30

Ser Val Thr Gln Ala Gly Val His Thr Cys Asn Pro Ser Tyr Ser Gly
 35 40 45

Gly

<210> 70
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 70
 Gly Pro Leu Pro Phe Leu Phe Ser Leu Tyr Pro Pro Pro Lys Arg Ala
 1 5 10 15

Gln Lys Lys Val Phe Ile Asn Ile Phe Gly Val Gly Glu Ile Gln Thr
 20 25 30

Ser Gln Arg Ile Arg Tyr Pro Gln Leu Lys Cys Thr Gly Thr Phe Val
 35 40 45

Ser Glu Phe His Phe Gln Ser Leu Pro Tyr Ile Gly Asn Cys Arg Ser
 50 55 60

Glu Leu Val Glu Val Ser Ser Cys Glu Thr Leu Glu Arg Lys Gln Lys
 65 70 75 80

Pro His Ala Thr Arg Ser Gly Leu Leu Cys Arg Cys Leu Phe
 85 90

<210> 71
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 71
 Met Thr Met Leu Gln Val Tyr Val Leu Ile Pro Leu Phe Val Ile Ile
 1 5 10 15

Leu Glu Cys Thr Pro Thr Asn Tyr Lys Lys Glu Lys Val Asn Cys Lys
 20 25 30

Lys Ala Ser Gly Arg Ser Phe Arg Arg His Ser Arg Arg Arg His Cys
 35 40 45

Tyr His Arg Arg
50

<210> 72
<211> 41
<212> PRT
<213> Homo sapiens

<400> 72
Met Arg Gly Lys Phe Pro His Asp Leu Leu Cys Phe Leu Ile Lys Leu
1 5 10 15
Leu Cys Pro Thr Ile Ala Gly Ser Ala Tyr Gly Cys Cys Asn Val Gly
20 25 30
Ser Ala Val Ser Cys Ser Tyr His Phe
35 40

<210> 73
<211> 63
<212> PRT
<213> Homo sapiens

<400> 73
Met Arg Gly Leu Ser Gln Phe Tyr Gly Phe Lys Tyr His Leu Asn Ala
1 5 10 15
Trp Asp Thr Gln Met Tyr Ile Pro Asn Ser Asp Cys Pro Pro Asn Ser
20 25 30
Lys Leu Ile Tyr Pro Asn Tyr Leu Phe Gln Ser Pro Leu Gly Tyr Leu
35 40 45
Ile Ile Met Ser His Leu Asp His Ala Asn Ser Ser Gln Ser Arg
50 55 60

<210> 74
<211> 30
<212> PRT
<213> Homo sapiens

<400> 74
Met Arg Cys Thr Pro Gly Phe Gly Leu Gly Thr Ser Gly Phe Ser Gln
1 5 10 15
Gly Arg Leu Glu Val Glu Thr Ser Thr Cys Val Thr Val Val
20 25 30

<210> 75
<211> 46
<212> PRT
<213> Homo sapiens

<400> 75
Met Thr Tyr Ser Phe Trp Gln Lys Lys Phe Pro Phe Pro Arg Gln Ile
1 5 10 15

Lys Leu Val Gln Gly Arg Ile Leu Ser Thr Glu Ile Leu Gly Asn Pro
 20 25 30

Ala Arg Glu Arg Glu Ser Leu Leu Leu Cys Phe Leu Leu Pro
 35 40 45

<210> 76

<211> 71

<212> PRT

<213> Homo sapiens

<400> 76

Met Val Gln Cys Pro Arg Thr Ser Lys Asp Gly Asp Leu Leu Ser Pro
 1 5 10 15

Ser Leu Arg Asp Glu Arg Arg His Trp Leu Cys Arg Arg Pro Gly Glu
 20 25 30

Arg Trp Asn Trp Arg Trp Gly Cys Trp Gln Glu Leu Trp Pro Gln Lys
 35 40 45

Glu Gly Ser Ser His Cys Leu Thr Cys Asp Gln Thr Arg Arg Glu Gln
 50 55 60

Gly Trp Trp Gly Ser Asp Thr
 65 70

<210> 77

<211> 51

<212> PRT

<213> Homo sapiens

<400> 77

Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln
 1 5 10 15

Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys
 20 25 30

Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr
 35 40 45

Cys Leu Leu
 50

<210> 78

<211> 107

<212> PRT

<213> Homo sapiens

<400> 78

Met Pro Leu Gly Cys Arg Glu Glu Ala Gly Gly Val Met Gly Met Gly
 1 5 10 15

Ser Gly Arg Gly Arg Glu Gly Pro Ser Thr Lys Ala Trp Glu Met Arg
 20 25 30

Gly Gly Gly Gly Arg Ala Gly Glu Ala Lys Ser Gln Pro Trp Arg Glu
 35 40 45

His	Pro	Gly	Ala	Ser	Val	Ser	Gly	Tyr	Thr	Gln	His	Phe	Ala	Thr	Cys
50						55					60				
Gly	Pro	Ala	Gly	Ala	Glu	Asp	Gly	Gly	Glu	Glu	Ala	Ser	Ser	Pro	Cys
65					70					75					80
Val	Tyr	Cys	Arg	Gln	Lys	Gly	Leu	Val	Phe	Trp	Phe	Trp	Gly	Phe	Cys
									85		90				95
Phe	Val	Cys	Val	Leu	Phe	Gly	Leu	Phe	Val	Phe					
									100		105				

<210> 79
<211> 105
<212> PRT
<213> *Homo sapiens*

```

<400> 79
Met Glu Ala Gly Glu Pro Gly Gly Leu Gly Gln Pro Trp Asp Gly Ser
1 5 10 15

Trp Ile Glu Glu Ser Arg Gly Val Met Arg Val Pro Ser Gly Leu Gly
20 25 30

Ser Leu Leu Leu Val Ser Asp Pro Pro Pro Phe Ser Ser Gln Ala Leu
35 40 45

Gly Ala Pro Gly Ser Glu Asp Ser Trp Glu Ser Ser Leu Arg Gln Val
50 55 60

Gln Gly Gln Ser Ser Asp Pro Gly Pro Gly Leu Leu Trp Val Pro Met
65 70 75 80

Asn Ser Ala Ser Gly Ser Glu Gln Phe Pro Ala Pro Leu Pro Glu Pro
85 90 95

Ser Val Leu Trp Asn Pro Trp Ala Gly
100 105

```

<210> 80
<211> 67
<212> PRT
<213> *Homo sapiens*

```

<400> 80
Met Cys Val Leu Met Ser Tyr Phe Gln Ser Cys Ala Leu Asn Gln Ser
   1           5           10          15

Trp His Thr Gly Ser Val Tyr Ile Lys Phe His Leu Ala Thr Asp Gly
   20          25          30

Gln Lys Ile Glu Met Pro Ser Tyr Gly Glu Tyr Phe Ser Phe Lys Lys
   35          40          45

Leu Lys Arg Leu Ile Ile Leu Lys Lys Lys Asn Arg Pro Thr Arg Pro
   50          55          60

Asp Tyr Met
   65

```

<210> 81
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 81
 Met Leu Trp Arg Cys Phe Val Ile Phe Lys Ile Cys Pro Tyr Cys Leu
 1 5 10 15
 Phe Lys Thr Pro Lys Ile Met Asn Ser Glu Thr His Pro Ala Gln Arg
 20 25 30
 Val Leu Asp Lys Gly Leu
 35

<210> 82
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 82
 Gly Thr Arg Pro Pro Ala Pro Val Thr Leu Thr His Thr Gly Leu Gly
 1 5 10 15
 Ala Gly Ile Phe Phe Ala Ile Ile Leu Val Thr Gly Ala Val Ala Leu
 20 25 30
 Ala Ala Tyr Ser Tyr Phe Arg Ile Asn Arg Arg Thr Ile Gly Phe Gln
 35 40 45
 His Phe Glu Ser Glu Glu Asp Ile Asn Val Ala Ala Leu Gly Lys Gln
 50 55 60
 Gln Pro Glu Asn Ile Ser Asn Pro Leu Tyr Glu Ser Thr Thr Ser Ala
 65 70 75 80
 Pro Pro Glu Pro Ser Tyr Asp Pro Phe Thr Asp Ser Glu Glu Arg Gln
 85 90 95
 Leu Glu Gly Asn Asp Pro Leu Arg Thr Leu
 100 105

<210> 83
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 83
 His Glu Ser Leu Phe Ile Glu Gly Val Ser Gly Cys Ser Leu Leu Ser
 1 5 10 15
 Ala Glu Thr Leu Ser Cys Pro Cys Ser Leu Val Trp Asn Gly Ser Arg
 20 25 30
 Val Thr Val Lys Glu Leu Asn Leu Pro Thr His Pro His Cys Ser Arg
 35 40 45
 Leu Arg Leu Ala Asp Leu Leu Ile Ala Glu Gln Glu His Ser Ser Lys
 50 55 60
 Leu Arg His Pro Tyr Leu Leu Gln Leu Met Ala Val Cys Leu Ser Gln
 65 70 75 80

Asp	Leu	Glu	Lys	Thr	Arg	Leu	Val	Tyr	Glu	Arg	Ile	Thr	Ile	Gly	Thr
85									90					95	
Leu	Phe	Ser	Val	Leu	His	Glu	Arg	Val	Asn	Cys	Cys	Phe	Arg	Gly	Phe
100								105					110		
Ser	Lys														
115									120						

<210> 84
 <211> 261
 <212> PRT
 <213> Homo sapiens

<400> 84															
Met	Ser	Gly	Glu	Ile	Ala	Met	Cys	Glu	Pro	Glu	Phe	Gly	Asn	Asp	Lys
1				5				10					15		
Ala	Arg	Glu	Pro	Ser	Val	Gly	Gly	Arg	Trp	Arg	Val	Ser	Trp	Tyr	Glu
				20				25					30		
Arg	Phe	Val	Gln	Pro	Cys	Leu	Val	Glu	Leu	Leu	Gly	Ser	Ala	Leu	Phe
				35				40					45		
Ile	Phe	Ile	Gly	Cys	Leu	Ser	Val	Ile	Glu	Asn	Gly	Thr	Asp	Thr	Gly
				50				55				60			
Leu	Leu	Gln	Pro	Ala	Leu	Ala	His	Gly	Leu	Ala	Gly	Leu	Val	Ile	
				65				70				75		80	
Ala	Thr	Leu	Gly	Asn	Ile	Ser	Gly	Gly	His	Phe	Asn	Pro	Ala	Val	Ser
				85					90				95		
Leu	Ala	Ala	Met	Leu	Ile	Gly	Gly	Leu	Asn	Leu	Val	Met	Leu	Leu	Pro
				100					105				110		
Tyr	Trp	Val	Ser	Gln	Leu	Leu	Gly	Gly	Met	Leu	Gly	Ala	Ala	Leu	Ala
				115					120				125		
Lys	Ala	Val	Ser	Pro	Glu	Glu	Arg	Phe	Trp	Asn	Ala	Ser	Gly	Ala	Ala
				130					135				140		
Phe	Val	Thr	Val	Gln	Glu	Gln	Gly	Gln	Val	Ala	Gly	Ala	Leu	Val	Ala
				145					150				155		160
Glu	Ile	Ile	Leu	Thr	Thr	Leu	Leu	Ala	Leu	Ala	Val	Cys	Met	Gly	Ala
				165									175		
Ile	Asn	Glu	Lys	Thr	Lys	Gly	Pro	Leu	Ala	Pro	Phe	Ser	Ile	Gly	Phe
				180					185				190		
Ala	Val	Thr	Val	Asp	Ile	Leu	Ala	Gly	Gly	Pro	Val	Ser	Gly	Gly	Cys
				195					200				205		
Met	Asn	Pro	Ala	Arg	Ala	Phe	Gly	Pro	Ala	Val	Val	Ala	Asn	His	Trp
				210					215				220		
Asn	Phe	His	Trp	Ile	Tyr	Trp	Leu	Gly	Pro	Leu	Leu	Ala	Gly	Leu	Leu
				225					230				235		240
Val	Gly	Leu	Leu	Ile	Arg	Cys	Phe	Ile	Gly	Asp	Gly	Lys	Thr	Arg	Leu
				245					250				255		

Ile Leu Lys Ala Gln
260

<210> 85
<211> 310
<212> PRT
<213> Homo sapiens

<400> 85
Met Met Thr Lys Tyr Ser Asn Leu Ser Leu Glu Ser His Asn Phe Ser
1 5 10 15
Leu Thr Ala Ser Pro Leu Thr Ser Leu Pro Ile Pro Glu Val Met Met
20 25 30
Thr Lys Tyr Ser Asn Leu Phe Leu Glu Ser His Asn Ile Ser Leu Thr
35 40 45
Glu His Ser Ser Val Pro Val Glu Lys Asn Ile Thr Leu Glu Arg Pro
50 55 60
Ser Ala Val Glu Leu Thr Cys Gln Phe Thr Thr Ser Gly Asp Val Asn
65 70 75 80
Ser Val Asn Val Thr Trp Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr
85 90 95
His Val Ser Ala Thr Glu Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser
100 105 110
Ile Ile Asn Ser Glu Gln Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu
115 120 125
Glu Lys Glu Arg Arg Gly Thr Phe Asn Phe Gly Val Pro Glu Val Gln
130 135 140
Arg Lys Asn Lys Pro Leu Ile Thr Tyr Val Gly Asp Ser Val Val Leu
145 150 155 160
Val Cys Lys Cys Arg His Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser
165 170 175
Gly Asn Arg Ser Val Gln Val Pro Leu Asp Val His Met Asn Glu Lys
180 185 190
Tyr Ala Ile Asn Gly Thr Asn Ala Asn Glu Thr Arg Leu Lys Ile Met
195 200 205
Gln Leu Ser Glu Asp Asp Lys Gly Ser Tyr Trp Cys His Ala Met Phe
210 215 220
Gln Leu Gly Glu Ser Gln Glu Ser Val Glu Leu Val Val Ile Ser Tyr
225 230 235 240
Leu Val Pro Leu Lys Pro Phe Leu Gly Ile Val Val Glu Val Ile Leu
245 250 255
Leu Val Ala Ile Ile Leu Phe Cys Glu Met His Thr Gln Lys Lys Lys
260 265 270
Met His Met Asp Asp Gly Lys Glu Phe Glu Gln Val Glu Gln Leu Lys
275 280 285
Ser Asp Asp Ser Asn Gly Ile Glu Asn Asn Ala Pro Arg His Arg Lys

290

295

300

Asn Glu Ala Met Ser Gln
 305 310

<210> 86
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 86
 Met His Ile Trp Val Cys Thr Phe Leu Phe Ile Ile His Phe Ser Pro
 1 5 10 15
 Phe Ser Ile Lys Glu His Ala Leu Gly Glu Leu Leu Ile Ala His Gln
 20 25 30
 Ser Gly Arg Gln His Ser Ile Leu Leu Cys Leu Leu Ser Pro Pro Val
 35 40 45
 Glu Val Phe Leu Leu Lys Gln Arg Arg Asn Arg Gln Ile Arg Leu Ala
 50 55 60
 Leu Leu Glu Met Trp Ser Arg Phe Leu Tyr Ser Gln Ala Pro Lys Lys
 65 70 75 80
 Ala Tyr Ile Gly Trp Ala Arg Ser Thr Pro Pro Glu Ser His Lys Ser
 85 90 95
 Ala Lys Ser Cys Phe Pro Cys Lys Gly Val Val Gln Trp Gly Thr Pro
 100 105 110
 Asp Val Gly Gly Lys Gln Glu Asp Phe Arg Val Glu Leu His Ser Asn
 115 120 125
 Leu Ser Ala Ala Ser Thr Met
 130 135

<210> 87
 <211> 257
 <212> PRT
 <213> Homo sapiens

<400> 87
 His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile
 1 5 10 15
 Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu
 20 25 30
 Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg
 35 40 45
 Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu
 50 55 60
 Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu
 65 70 75 80
 Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His
 85 90 95

HUMAN SECRETIN

Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu
 100 105 110
 Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Gly Phe Gly Leu Thr
 115 120 125
 Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser
 130 135 140
 Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val
 145 150 155 160
 Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu
 165 170 175
 Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu
 180 185 190
 Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu
 195 200 205
 Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys
 210 215 220
 Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser
 225 230 235 240
 Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro
 245 250 255
 Gln

<210> 88
 <211> 84
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (28)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 88
 Val Ser Arg Arg Gln Ala Arg Arg Met Val Thr Glu Thr Ser Arg Arg
 1 5 10 15

 Arg Arg Ile Gln Glu Leu Glu Glu Arg Arg Arg Xaa Phe Val Glu Ala
 20 25 30

 Cys Arg Ala Arg Glu Ala Ala Phe Asp Ala Glu Tyr Gln Arg Asn Pro
 35 40 45

 His Arg Val Asp Leu Asp Ile Leu Thr Phe Thr Ile Ala Leu Thr Ala
 50 55 60

 Ser Glu Val Ile Asn Pro Leu Ile Glu Glu Leu Gly Cys Asp Lys Phe
 65 70 75 80

 Ile Asn Arg Glu

<210> 89
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 89
 His Glu Ile Gln Gly Tyr Tyr Arg Gln Tyr Arg Gln Glu Pro Val Arg
 1 5 10 15

Phe Gly Asn Ile Gly Phe Gly Thr Pro Tyr Tyr Tyr Val Gly Trp Tyr
 20 25 30

Glu Cys Gly Val Ser Ile Pro Gly Lys Trp
 35 40

<210> 90
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 90
 Met Met Tyr Cys Ile Leu Lys Tyr Ser Asn Cys Ala Phe Leu Tyr His
 1 5 10 15

Leu Gln Tyr Glu Lys Cys Gln Tyr Leu Val Pro Phe Ser Gly Thr Ile
 20 25 30

Arg Phe Leu Leu Thr Leu Phe Ser Pro Leu Thr His Val Ile Ser His
 35 40 45

Ser Asn Gln Glu Ser Arg Glu
 50 55

<210> 91
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 91
 Met Thr Leu Asn Val Val Asp Ala Ile Ser Ala Cys Gln Arg Gly Gly
 1 5 10 15

Phe Leu Gln Ser Val Gln Ser Thr Glu Thr Met Val Arg Val Val Phe
 20 25 30

Leu Ile Leu Phe Leu Val Gly Gln Gln Glu Pro Phe Pro Ile
 35 40 45

<210> 92
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 92
 Met Leu Asn Phe Leu Trp Gly His Ser Leu Ile Val Pro Ala Ala Ala
 1 5 10 15

Thr Gly Ala Ser Leu Glu Ala Ala Cys Ala Lys Thr Thr Gln Leu Ser
 20 25 30

Leu Gly Ser His Pro Arg Ala Phe Phe Ala Ser Arg Ser Gly Asp Leu
 35 40 45

Leu Gln
 50

<210> 93
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 93
 Met Pro Gln Ala Thr Tyr Pro Gly Glu Ser Leu Pro Val Leu Leu His
 1 5 10 15

Glu Phe Leu Ser His Arg Met His Val Pro Leu His Phe Val Thr Ser
 20 25 30

Val Ser Pro Thr Arg Gln
 35

<210> 94
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 94
 Met Arg Cys Thr Pro Gly Phe Gly Leu Gly Thr Ser Gly Phe Ser Gln
 1 5 10 15

Gly Arg Leu Glu Val Glu Thr Ser Thr Cys Val Thr Val Val
 20 25 30

<210> 95
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 95
 Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln
 1 5 10 15

Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys
 20 25 30

Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr
 35 40 45

Cys Leu Leu
 50

<210> 96
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 96
 Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln

1	5	10	15
Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys			
20	25		30
Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr			
35	40	45	
Cys Leu Leu Tyr Leu Phe Asn Val His Ile Leu Lys Lys Ser Ser Leu			
50	55	60	
Tyr Glu Leu Phe			
65			

<210> 97

<211> 63

<212> PRT

<213> Homo sapiens

<400> 97

Met Ser Tyr Phe Gln Ser Cys Ala Leu Asn Gln Ser Trp His Thr Gly			
1	5	10	15

Ser Val Tyr Ile Lys Phe His Leu Ala Thr Asp Gly Gln Lys Ile Glu			
20	25	30	

Met Pro Ser Tyr Gly Glu Tyr Phe Ser Phe Lys Lys Leu Lys Arg Leu			
35	40	45	

Ile Ile Leu Lys Lys Asn Arg Pro Thr Arg Pro Asp Tyr Met			
50	55	60	

<210> 98

<211> 75

<212> PRT

<213> Homo sapiens

<400> 98

Ile Arg His Glu Ser Leu Phe Ile Glu Gly Val Ser Gly Cys Ser Leu			
1	5	10	15

Leu Ser Ala Glu Thr Leu Ser Cys Pro Cys Ser Leu Val Trp Asn Gly			
20	25	30	

Ser Arg Val Thr Val Lys Glu Leu Asn Leu Pro Thr His Pro His Cys			
35	40	45	

Ser Arg Leu Arg Leu Ala Asp Leu Leu Ile Ala Glu Gln Glu His Ser			
50	55	60	

Ser Lys Leu Arg Ala Pro Leu Thr Cys Tyr Ser			
65	70	75	

<210> 99

<211> 9

<212> PRT

<213> Homo sapiens

<400> 99

His Phe Asn Pro Ala Val Ser Leu Ala

PROTEIN SEQUENCES

1 5

```

<210> 100
<211> 9
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 100
Xaa Xaa Asn Pro Xaa Xaa Xaa Xaa
    1           5

```

```

<210> 101
<211> 38
<212> PRT
<213> Homo sapiens

<400> 101
Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys
    1           5           10           15
Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu
    20           25           30
Arg Phe Val Gln Pro Cys
    35

```

<210> 102
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 102
 Leu Val Glu Leu Leu Gly Ser Ala Leu Phe Ile Phe Ile Gly Cys Leu
 1 5 10 15

<210> 103
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 103
 Ser Val Ile Glu Asn Gly Thr Asp Thr Gly
 1 5 10

<210> 104
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 104
 Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile
 1 5 10 15
 Ala

<210> 105
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 105
 Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala
 1 5 10

<210> 106
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 106
 Val Ser Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu
 1 5 10 15

Leu

<210> 107

<211> 46
 <212> PRT
 <213> Homo sapiens

 <400> 107
 Pro Tyr Trp Val Ser Gln Leu Leu Gly Gly Met Leu Gly Ala Ala Leu
 1 5 10 15

 Ala Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala
 20 25 30

 Ala Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala
 35 40 45

<210> 108
 <211> 17
 <212> PRT
 <213> Homo sapiens

 <400> 108
 Leu Val Ala Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys
 1 5 10 15

 Met

<210> 109
 <211> 10
 <212> PRT
 <213> Homo sapiens

 <400> 109
 Gly Ala Ile Asn Glu Lys Thr Lys Gly Pro
 1 5 10

<210> 110
 <211> 17
 <212> PRT
 <213> Homo sapiens

 <400> 110
 Leu Ala Pro Phe Ser Ile Gly Phe Ala Val Thr Val Asp Ile Leu Ala
 1 5 10 15

 Gly

<210> 111
 <211> 27
 <212> PRT
 <213> Homo sapiens

 <400> 111
 Gly Pro Val Ser Gly Gly Cys Met Asn Pro Ala Arg Ala Phe Gly Pro
 1 5 10 15

 Ala Val Val Ala Asn His Trp Asn Phe His Trp
 20 25

<210> 112
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 112
 Ile Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu Val Gly Leu Leu
 1 5 10 15
 Ile

<210> 113
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 113
 Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu Ile Leu Lys Ala Gln
 1 5 10 15

<210> 114
 <211> 320
 <212> PRT
 <213> Homo sapiens

<400> 114
 Phe Pro Gly Arg Pro Thr Arg Pro Glu Val Met Met Thr Lys Tyr Ser
 1 5 10 15
 Asn Leu Ser Leu Glu Ser His Asn Phe Ser Leu Thr Ala Ser Pro Leu
 20 25 30

Thr Ser Leu Pro Ile Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu
 35 40 45

Phe Leu Glu Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro
 50 55 60

Val Glu Lys Asn Ile Thr Leu Glu Arg Pro Ser Ala Val Glu Leu Thr
 65 70 75 80

Cys Gln Phe Thr Thr Ser Gly Asp Val Asn Ser Val Asn Val Thr Trp
 85 90 95

Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr His Val Ser Ala Thr Glu
 100 105 110

Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser Ile Ile Asn Ser Glu Gln
 115 120 125

Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu Glu Lys Glu Arg Arg Gly
 130 135 140

Thr Phe Asn Phe Gly Val Pro Glu Val Gln Arg Lys Asn Lys Pro Leu
 145 150 155 160

Ile Thr Tyr Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His
 165 170 175
 Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln
 180 185 190
 Val Pro Leu Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr
 195 200 205
 Asn Ala Asn Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp
 210 215 220
 Lys Gly Ser Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln
 225 230 235 240
 Glu Ser Val Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro
 245 250 255
 Phe Leu Gly Ile Val Val Glu Val Ile Leu Leu Val Ala Ile Ile Leu
 260 265 270
 Phe Cys Glu Met His Thr Gln Lys Lys Lys Met His Met Asp Asp Gly
 275 280 285
 Lys Glu Phe Glu Gln Val Glu Gln Leu Lys Ser Asp Asp Ser Asn Gly
 290 295 300
 Ile Glu Asn Asn Ala Pro Arg His Arg Lys Asn Glu Ala Met Ser Gln
 305 310 315 320

<210> 115
 <211> 256
 <212> PRT
 <213> Homo sapiens

<400> 115
 Phe Pro Gly Arg Pro Thr Arg Pro Glu Val Met Met Thr Lys Tyr Ser
 1 5 10 15
 Asn Leu Ser Leu Glu Ser His Asn Phe Ser Leu Thr Ala Ser Pro Leu
 20 25 30
 Thr Ser Leu Pro Ile Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu
 35 40 45
 Phe Leu Glu Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro
 50 55 60
 Val Glu Lys Asn Ile Thr Leu Glu Arg Pro Ser Ala Val Glu Leu Thr
 65 70 75 80
 Cys Gln Phe Thr Thr Ser Gly Asp Val Asn Ser Val Asn Val Thr Trp
 85 90 95
 Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr His Val Ser Ala Thr Glu
 100 105 110
 Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser Ile Ile Asn Ser Glu Gln
 115 120 125

Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu Glu Lys Glu Arg Arg Gly
 130 135 140

Thr Phe Asn Phe Gly Val Pro Glu Val Gln Arg Lys Asn Lys Pro Leu
 145 150 155 160

Ile Thr Tyr Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His
 165 170 175

Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln
 180 185 190

Val Pro Leu Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr
 195 200 205

Asn Ala Asn Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp
 210 215 220

Lys Gly Ser Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln
 225 230 235 240

Glu Ser Val Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro
 245 250 255

PROTEIN SEQUENCE

<210> 116
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 116
 Phe Leu Gly Ile Val Val Glu Val Ile Leu Leu Val Ala Ile Ile Leu
 1 5 10 15

Phe

<210> 117
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 117
 Cys Glu Met His Thr Gln Lys Lys Lys Met His Met Asp Asp Gly Lys
 1 5 10 15

Glu Phe Glu Gln Val Glu Gln Leu Lys Ser Asp Asp Ser Asn Gly Ile
 20 25 30

Glu Asn Asn Ala Pro Arg His Arg Lys Asn Glu Ala Met Ser Gln
 35 40 45

<210> 118
 <211> 246
 <212> PRT
 <213> Homo sapiens

<400> 118

Met Met Thr Lys Tyr Ser Asn Leu Ser Leu Glu Ser His Asn Phe Ser
 1 5 10 15
 Leu Thr Ala Ser Pro Leu Thr Ser Leu Pro Ile Pro Glu Val Met Met
 20 25 30
 Thr Lys Tyr Ser Asn Leu Phe Leu Glu Ser His Asn Ile Ser Leu Thr
 35 40 45
 Glu His Ser Ser Val Pro Val Glu Lys Asn Ile Thr Leu Glu Arg Pro
 50 55 60
 Ser Ala Val Glu Leu Thr Cys Gln Phe Thr Thr Ser Gly Asp Val Asn
 65 70 75 80
 Ser Val Asn Val Thr Trp Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr
 85 90 95
 His Val Ser Ala Thr Glu Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser
 100 105 110
 Ile Ile Asn Ser Glu Gln Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu
 115 120 125
 Glu Lys Glu Arg Arg Gly Thr Phe Asn Phe Gly Val Pro Glu Val Gln
 130 135 140
 Arg Lys Asn Lys Pro Leu Ile Thr Tyr Val Gly Asp Ser Val Val Leu
 145 150 155 160
 Val Cys Lys Cys Arg His Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser
 165 170 175
 Gly Asn Arg Ser Val Gln Val Pro Leu Asp Val His Met Asn Glu Lys
 180 185 190
 Tyr Ala Ile Asn Gly Thr Asn Ala Asn Glu Thr Arg Leu Lys Ile Met
 195 200 205
 Gln Leu Ser Glu Asp Asp Lys Gly Ser Tyr Trp Cys His Ala Met Phe
 210 215 220
 Gln Leu Gly Glu Ser Gln Glu Ser Val Glu Leu Val Val Ile Ser Tyr
 225 230 235 240
 Leu Val Pro Leu Lys Pro
 245

<210> 119
 <211> 81
 <212> PRT
 <213> Homo sapiens

<400> 119
 Gly His Ser Leu Thr Cys Tyr Ala Cys Ile Asp Arg Glu Thr Cys Asn
 1 5 10 15
 Lys Thr Thr Val Cys Ser Val Asn His Asp Ala Cys Leu Leu Val Lys
 20 25 30
 Ala Asp Pro Lys Leu Phe Tyr Arg Gln Cys Trp Lys Phe Asp Asp Cys
 35 40 45
 Ser Tyr Leu Ser Ile Ser Lys Ala Leu Gly Leu Lys Lys Leu Gln Tyr

50	55	60
----	----	----

Ser Cys Cys Gln Lys Asp	Leu Cys Asn Gly Ser Ala Arg Val Ser Gly	80
65	70	75

Met

<210> 120

<211> 78

<212> PRT

<213> Homo sapiens

<400> 120

Leu Thr Cys Tyr Ala Cys Ile Asp Arg Glu Thr Cys Asn Lys Thr Thr	1	15
5	10	

Val Cys Ser Val Asn His Asp Ala Cys Leu Leu Val Lys Ala Asp Pro	20	30
	25	

Lys Leu Phe Tyr Arg Gln Cys Trp Lys Phe Asp Asp Cys Ser Tyr Leu	35	45
35	40	45

Ser Ile Ser Lys Ala Leu Gly Leu Lys Lys Leu Gln Tyr Ser Cys Cys	50	60
	55	

Gln Lys Asp Leu Cys Asn Gly Ser Ala Arg Val Ser Gly Met	65	75
65	70	75

<210> 121

<211> 18

<212> PRT

<213> Homo sapiens

<400> 121

Leu Asn Ser Arg Asp Ala Ala Arg His Thr Ala Glu Gln Asn Ala Thr	1	15
5	10	

Asn Thr

<210> 122

<211> 15

<212> PRT

<213> Homo sapiens

<400> 122

Met Leu Pro Ser Ile Ser Val Asn Ser Pro Met Gln Gly Asn Gly	1	15
5	10	

<210> 123

<211> 13

<212> PRT

<213> Homo sapiens

<400> 123

Gly Phe Val Leu Asp Met Gly Phe Phe Glu Thr Ile Lys	1	10
5	10	

<210> 124
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 124
 Ser Thr Leu Met Trp Phe Ile Ser Asn Lys Tyr Leu Val Lys Arg Gln
 1 5 10 15

Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr Ala Phe Asp Val His Leu
 20 25 30

Asn Ala Phe Tyr Pro
 35

<210> 125
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 125
 Leu Thr Asp Thr Phe Ile Gly Tyr Phe Val Gly Asn
 1 5 10

<210> 126
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 126
 Tyr Ser Ala Leu Pro Phe Leu Lys Asn
 1 5

<210> 127
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 127
 Ser Leu Ala Leu Gly Trp Asn Phe Thr His Thr Leu Cys Ser Phe Tyr
 1 5 10 15

Lys Tyr Arg Val Lys
 20

<210> 128
 <211> 249
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (4)
 <223> Xaa equals any of the naturally occurring L-amino acids

```

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 128
Met Leu Pro Xaa Xaa Pro Trp Asn Ser Pro Met Pro Gly Asn Gly Cys
 1           5           10          15

Trp Xaa Ser Arg Gly Cys Gln Gln Asp Thr Gln Xaa Ser Lys Thr Leu
 20          25          30

Pro Ile Xaa Glu Lys Thr Phe Ser Phe Ser Gln Met Asp Phe Glu Phe
 35          40          45

Ala Ala Trp Gln Met Leu Tyr Leu Phe Thr Ser Pro Gln Arg Val Tyr
 50          55          60

Arg Asn Phe His Tyr Arg Lys Gln Thr Lys Asp Gln Trp Ala Arg Asp
 65          70          75          80

Asp Pro Ala Phe Leu Val Leu Leu Ser Ile Trp Leu Cys Val Ser Thr
 85          90          95

Ile Gly Phe Gly Phe Val Leu Asp Met Gly Phe Phe Glu Thr Ile Lys
100         105         110

Leu Leu Leu Trp Val Val Phe Ile Asp Cys Val Gly Val Gly Leu Leu
115         120         125

Ile Ser Thr Leu Met Trp Phe Ile Ser Asn Lys Tyr Leu Val Lys Arg
130         135         140

Gln Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr Ala Phe Asp Val His
145         150         155         160

Leu Asn Ala Phe Tyr Pro Leu Leu Val Ile Leu His Phe Ile Gln Leu
165         170         175

Phe Phe Ile Asn His Val Ile Leu Thr Asp Thr Phe Ile Gly Tyr Phe
180         185         190

Val Gly Asn Thr Leu Trp Leu Val Ala Val Gly Tyr Tyr Ile Tyr Val
195         200         205

Thr Phe Leu Gly Tyr Ser Ala Leu Pro Phe Leu Lys Asn Thr Val Ile
210         215         220

Leu Leu Tyr Pro Phe Ala Pro Leu Ile Leu Leu Tyr Gly Leu Ser Leu
225         230         235         240

```

Ala Leu Gly Trp Asn Phe Thr His Thr
245

<210> 129
<211> 61
<212> PRT
<213> Homo sapiens

<400> 129
Met Met Val Ser Cys Ala Cys Glu His Leu Leu Glu Leu Arg Gly Leu
1 5 10 15
Thr Thr Ser Thr Arg Trp Pro Trp Leu Val Pro His Thr Gly Leu Val
20 25 30
Leu Lys Ile Arg Ser Pro Arg Gln Gly Glu Pro Gly Ala Pro Pro Leu
35 40 45
Ser Val Cys Leu Ser Pro Val Val Ser Leu Cys Cys Cys
50 55 60

<210> 130
<211> 17
<212> PRT
<213> Homo sapiens

<400> 130
Leu Cys Leu Cys Phe Cys Leu Ser Val Ala Met Ser Leu Val Ile Phe
1 5 10 15
Leu

<210> 131
<211> 40
<212> PRT
<213> Homo sapiens

<400> 131
Cys Pro Ala Ala Ile Ser Ala Leu Val Thr Ser Thr Leu Leu Ser Pro
1 5 10 15
Arg Asp Ala Thr His Trp Gly Ser Val Gly Glu Ile Ala Leu Gly Pro
20 25 30
His Ala Ser Ile Pro Gly Trp Leu
35 40

<210> 132
<211> 16
<212> PRT
<213> Homo sapiens

<400> 132
Cys Leu Pro Val Ser Leu His Val Ser Pro Cys Val Phe Leu Ser Val
1 5 10 15

<210> 133
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 133
 Ser Leu Thr Gly Arg Asp Ala Glu
 1 5

<210> 134
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 134
 Met Asp Thr Glu Lys Ser Trp Ile Pro Arg Val Trp Leu Ala Leu Ser
 1 5 10 15
 Cys Pro Leu Val Ile Ser Glu Trp Phe Leu Ile Leu Cys Ile His Val
 20 25 30
 Met Arg Gly Lys Phe Pro His Asp Leu Leu Cys Phe Leu Ile Lys Leu
 35 40 45
 Leu Cys Pro Thr Ile Ala Gly Ser Ala Tyr Gly Cys Cys Asn Val Gly
 50 55 60
 Ser Ala Val Ser Cys Ser Tyr His Phe
 65 70

<210> 135
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 135
 Met Pro Leu Gly Cys Arg Glu Glu Ala Gly Gly Val Met Gly Met Gly
 1 5 10 15
 Ser Gly Arg Gly Arg Glu Gly Pro Ser Thr Lys Ala Trp Glu Met Arg
 20 25 30
 Gly Gly Gly Arg Ala Gly Glu Ala Lys Ser Gln Pro Trp Arg Glu
 35 40 45
 His Pro Gly Ala Ser Val Ser Gly Tyr Thr Gln His Phe Ala Thr Cys
 50 55 60
 Gly Pro Ala Gly Ala Glu Asp Gly Gly Glu Glu Ala Ser Ser Pro Cys
 65 70 75 80
 Val Tyr Cys Arg Gln Lys Gly Leu
 85

<210> 136
 <211> 16

<212> PRT
 <213> Homo sapiens

<400> 136
 Val Phe Trp Phe Trp Gly Phe Cys Phe Val Cys Val Leu Phe Gly Leu
 1 5 10 15

<210> 137
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 137
 Glu Gln Asp Pro His Ala Ala Gln Pro Cys Leu Thr Arg Gly Trp Pro
 1 5 10 15
 Gln Lys Arg Val Gly Glu Ala Gly Gln Gln Gly Leu Ala Glu Ile Ile
 20 25 30
 Cys Arg Ala Gln Glu Ala Gly Glu Arg Arg Gln Phe Gln Gly Pro Phe
 35 40 45
 Val Arg Gln Val Pro Gly Ala Gln Pro Gly Arg Gln Glu Gly Leu Ser
 50 55 60
 Pro Ser Pro Arg Gln Glu Gly Ser Gln Ala Glu Ala Pro Pro Ser Gly
 65 70 75 80
 Thr Pro Gln Pro Thr Pro Ala Ala Leu Gly Pro Arg Leu Ile Lys His
 85 90 95
 Pro Pro His Gly Arg Gln Leu Tyr Leu Val Asp Arg Lys Ser Ala Ser
 100 105 110
 Pro Ile Tyr Asp Gly Thr
 115

<210> 138
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 138
 Thr Gly Ala Gln Glu Arg Thr Ser Val Arg Leu Thr Ala Arg Cys Cys
 1 5 10 15
 Thr Glu Asn Pro Gln Pro Glu Pro Leu Gly Pro Ala Gln Ala Arg Pro
 20 25 30
 Glu Lys Glu Gly Ala Gly Gly Arg Pro Ala Trp Gly Ser Arg Glu Ala
 35 40 45
 His Gly Met Glu Ala Gly Glu Pro Gly Gly Leu Gly Gln Pro Trp Asp
 50 55 60
 Gly Ser Trp Ile Glu Glu Ser Arg Gly Val Met Arg Val Pro Ser Gly
 65 70 75 80
 Leu Gly Ser Leu Leu Leu Val Ser Asp Pro Pro Phe Ser Ser Gln

2000-02-26 09:22:47

85

90

95

Ala Leu Gly Ala Pro Gly Ser Glu Asp Ser Trp Glu Ser Ser Leu Arg
100 105 110

Gln Val Gln Gly Gln Ser Ser Asp Pro Gly Pro Gly Leu Leu Trp Val
115 120 125

Pro Met Asn Ser Ala Ser Gly Ser Glu Gln Phe Pro Ala Pro Leu Pro
130 135 140

Glu Pro Ser Val Leu Trp Asn Pro Trp Ala Gly
145 150 155